THE

TRADESMAN;

OR,

COMMERCIAL MAGAZINE.

VOL. IV.] MARCH 1, 1810. [No. 21.

ON THE GENERAL AND PARTICULAR USES OF BORAX, SAL AMMONIAC, ALUM, AND CULINARY SALT.

On Borax, and its Uses in the Arts.

ALL the borax of commerce is imported from Asia, in a rough state or in crystals, which vary in shape according to the sorts, which are always sallow and covered over with an unctuous filmy scum, of which we do not know the exact origin.

Some think that this impurity is owing to the place itself where the borax is formed, and to the means that are employed to crystallize it; others attribute it to the grease or butter with which these crystals are rubbed on the spot, so as to prevent its efflorescence on exposure to the air.

This salt is called *baurachs* by the Arabians; the name *tinckal*, which it is said the Indians give it, appears to belong more particularly to the gross matter which envelops the salt than to the salt itself.

We distinguish in commerce many sorts of rough borax: 1st. The borax of India, in small crystals, very beautiful; they are enveloped and linked together by an unctuous substance. 2d. The borax of Bengal or Chandernagor, in large crystals, round at the edges; they are drier than the former, and sometimes surrounded by leaves. 3d. The borax of Bengal partly refined, more limped and pure than the former.

The different sorts of borax require to be purified before they are used. For a long time, the Dutch have been possessed of the only means of obtaining borax in large crystals.

This salt, when elubriated to separate foreign bodies, is to be dissolved in hot water; strain the solution through a sieve; it is then to be evaporated and refined in boilers of lead, until the liquor is sufficiently concentrated; pour it out into large tubs strongly girded with hoops, after it is slowly cooled, that it may shoot into large crystals; this crystallization continues twenty days. M. Vauquelin observed that by this means you scarcely obtained 4-5ths of the borax employed; but if lime be used, the unctuous matter which encompasses the crystals will be decomposed, and it will seem like a soap, the base of which is soda.

The history of this salt, from its formation to its purification, is accompanied by uncertainty.

Borax is used in assaying, and by goldsmiths, for its ready fusibility and difficult volatilization; it facilitates the fusion of metals which we wish to examine or solder.* We employ it after being melted; during the time of its intumescence it does not derange the little pieces you want to solder. It is used in glass-houses in France to facilitate the fusion of glass; they put about five hectograms into each pot; too great a quantity would give the glass a yellow tint. It is used as a flux to colours, and to gold when it is applied to porcelain.

It is purified in Europe from the oriental. In metallurgy it is eminently useful; and in chymistry, from its property of hastening fusion, it is frequently employed in assaying at the blow-pipe.

On Soda, and its Uses.

The uses of soda are so numerous that we shall only name the principal: this salt mixed with oils and all sorts of grease produces different sorts of soap. Mixed and melted with flint, it produces the most durable and beautiful glass.

The ancient Egyptians employed it to prepare bodies for embalming; they left them sixty-six days in this salt, says Herodotus. The women used it to blanch and soften their skin. They also employ it for the same use in the Indies.

On Alum, and its Uses.

Alum is used in painting to heighten colours, and to fix them upon cloths; and is employed in the preparation of leather and candles; it gives much density to these two substances. It is used, on account of its excess of acid, to cleanse metals, that is to say, to polish their

* It is used in hard soldering, laying hold of the surface of the metals; it promotes fusion, while the resin keeps the surface free from oxidation.

surfaces, probably in dissolving the oxide which adheres to them. It is employed in the preparation of strong glue, to keep off flies, in painting on plaster of Paris, in the preparation of silks and coloured papers, also to prevent paper from blotting. The English put it into their bread to render it light and white. It is used in medicine as an astringent to stop hœmorrhages; and in surgery as a caustic. It makes wood, when steeped in it, almost incombustible. Lastly, it is used to clarify certain liquors, probably from coagulating the albumen, in which it becomes dissolved.

Uses of Sal Ammoniac.

Muriate of ammonia is used in medicine and many of the arts. It is employed in painting, to revive certain colours; it is also used in the tinning of copper and iron, and in solder. Mixed with melted lead, it is said to make it more brittle and more proper for small shot.

Uses of Nitre.

Gunpowder is made by exactly mixing 76 parts of nitre, nine of sulphur, and 15 of finely powdered charcoal.

The nitric acid is not directly formed; it is extracted from the nitrate of potash or nitre by means of sulphuric acid, or still better by clay. Nitre is employed in docimacy, and in metallurgy, as a flux or oxidator. It is used in painting; it is also used in medicine as a cooler and diuretic.

Uses of Muriate of Soda (culinary Salt).

Some of the uses of muriate of soda are very well known in all parts of the world. Not only is this salt an agreeable and wholesome seasoning for man, but almost all herbivorous animals like it, and it appears to be very salutary for them. Salt has some other particular uses, and sufficiently peculiar: wood steeped in its solution will scarcely burn. It is thought that in Persia they sprinkle the timber of their buildings with salt, to prevent them from rotting.

It is used in Abyssinia instead of money; it passes there from hand to hand under the shape of a brick, which is scarcely worth 1 fr. 25 cents, says Dr. Bruce.

It appears very probable that the vitrified fossile pillars in which the Abyssinians enshrined the mummies of their ancestry, according to Herodotus, were nothing more than masses of salgem, a substance very common in that part of Africa.

Salt was looked upon by the ancients as positively inimical to vege-

tation: they performed the ceremony of sowing salt on such land as they wished to render unproductive. Daily experience contradicts this opinion. However, it is also looked upon as fattening or bettering the condition of cattle, when employed in small quantities. Many farmers buy refuse salt to enrich their ground.

The muriate of soda is employed in some chymical arts. It is sometimes used as a varnish for certain earthen-ware.

HISTORY OF NEW ORLEANS.

(Concluded from page 102.)

THE soil of this country is of a richness and fertility hardly to be conceived by a European; figure to yourself the leaves of trees and reeds, and all kinds of vegetable productions, falling for many thousands of years, and by their corruption and decay forming every year a thin layer of a black light earth, which possesses in a wonderful degree all the principles of vegitation. Saltpetre may be extracted in abundance from the soil; it is a pure virgin earth, light as a sponge, from one to three feet deep, and seems too exquisitely fine for the rough purposes of our rude husbandry; it seems as if prepared for the reception of flowers, or for the cultivation of the most curious Indian exotics. Its first year's productions are not profitable; the soil is too full of fire; the plant grows with a savage luxuriance, it is beautiful to the eye, but replete only with aqueous juices, an abundance of straw, but little fruit. Every succeeding year meliorates the soil, and the toil of the husbandman is at length repaid with crops of a thousand fold. This expression is not hyperbolical; for it is very possible that one grain of rice may produce 100 stalks, and every stalk 100 grains, and so of every other produce. It would be here a great error to plant or sow too near or too thick; your crop would cover the ground with a luxuriance of production in stem and straw, but very little grain. You may imagine, where the ground is uneven, that this soil is liable to be washed away: this is a misfortune attending those parts that are the most hilly. Rains tumble down in this country as if sluices were opened upon us: where the ground is very uneven and the soil cultivated, it is carried away very fast into the vallies. I have known this rich soil carried off to the thickness of a foot in three years' time. But you will say, what is to be found under this soil? Why, nothing less than a true marl, or rather marly loam, in which the marl is rather too predominant; it is itself an excellent soil, but it retains water upon its surface where the land is level. The inhabitants, not

sensible of the treasures of their soil, naturally indolent, think themselves undone when the fine virgin mould is gone; they therefore leave out the first cleared land for pasture, and cut down a fresh parcel of timber, which is immediately burnt upon the ground; as soon as it is cold the land is planted without any tillage, and produces wonderfully. Wells have been dug to the depth of 200 feet without meeting with the appearance of a stone. The plough encounters no difficulties in opening this virgin soil, one good horse is equal to the task after it has been once broke up and the roots torn to pieces. One sees very little true clay in this country, although this name is generally given to the stratum of marl that supports the soil; it is nearly of the colour of hazel loam; its depth is not less than twelve or fifteen feet; after which one pierces through a variety of strata chiefly of the marl kind, and a little sand, when we arrive at water.

About 30 miles from the eastern bank of the Mississippi, the country is totally different from the above description; there one finds plenty of pine timber, and a great plenty of excellent grass fit for pasture; the richer lands, above described, do not in general produce grass, they are covered with a coat of canes, reeds, and underwood, in many places impenetrable without the aid of iron tools. The soil of the pine country would not appear in Europe to be without merit, but here we term it barren; it consists of a clayey loam, with a greater and less mixture of gravel and sand. The country is more elevated than that above described; here and there one sees a few rocks of a soft stone that has been blown up to the tops of the higher grounds at the first formation of these hills. Time has not yet formed a soil of any thickness worth naming, which induces one to conclude that this country is much younger than the other. A person of a speculative humour might form a probable conjecture of the age of this part of the world. For example, I find that the annual accumulation of soil from the rotting of the vegetable productions, when reduced to a true earth, does not exceed the 1-100th part of an inch, and I find the depth of soil to be three feet where it could not have received any addition from higher grounds. I therefore conclude the age of this country to be 3000 years; but I have reason to think it still older, for I find the soil heavier and more compact below than at the surface. I also suppose that rains must carry a portion of it away; it appears to me that it is not too much to give it 5000 years upon the whole. My dear friend,

Your most obedient servant,

W. D.

EFFECTUAL METHOD OF PRESERVING FRUIT WITHOUT SUGAR, AS A SUBSTITUTE FOR FOREIGN FRUIT.

TO THE EDITOR OF THE TRADESMAN, OR COMMERCIAL MAGAZINE.

SIR,

As any discovery or improvement that can contribute to the wants of the British nation, either as articles of necessity or luxury, in the lieu of such as we are obliged to be indebted to our neighbours, deserves to be generally known and adopted, I think the extensive circulation of your Magazine, not only through the commercial and trading parts of this kingdom, but among the public at large, may be the means of substituting, in some degree, our English fruit for those which we are annually obliged to import for the supply of our table. Against the preservation of the former, the general excuse is the great expence of sugar, and the uncertainty of success, from the strong fermentable quality of many of our fruits. They may indeed be preserved for a length of time without sugar, by baking or boiling, and then closely stopping; them up but if the cork becomes dry, the atmospheric air exchanges place with what is impregnated by the fruit, which then soon becomes mouldy. But fruits may be preserved in good condition by the following process, for two years, or, it is probable, for a much longer period, even in hot climates.

The fruit being clean picked, and not too ripe, is to be put into wine or porter bottles, as they are cheaper than what are called gooseberry bottles, and can be procured in places where the others cannot be had. The bottles must be filled as full as they can be packed, and corks being stuck lightly into them, they are to be placed upright in a kettle of water, and heated gradually to about 160° or 170° Fahr. that is to say, until the water feels very hot to the finger, but not to scald. This degree of heat is to be kept up for half an hour, and then the bottles being taken out one by one they are to be filled up to within an inch of the cork with *boiling* water, the cork fitted very close and tight, and the bottle laid on its side that the cork may be kept moist. To prevent fermentation and mould, the bottles are to be turned once or twice a week for the first month or two, and once or twice a month afterwards.

When applied to use some of the liquor first poured off serves to put into pies, &c. instead of water, and the remainder being boiled up with a little sugar will make a rich and agreeable syrup.

The fruit ought not to be cracked by the heat. Some trials were made by keeping the bottles in a heat of 190° for three quarters of an hour, but the fruit was reduced to nearly a pulp.

Samples of apricots, gooseberries, currants, raspberries, cherries, plums, Orlean plums, egg plums, damsons, Siberian crabs, green gages, and rhubarb, were presented to the Society of Arts by Mr. Thomas Saddington.

In the summer of 1807, it cost about 1*l.* 9*s.* exclusive of the charge of bottles and corks, to preserve 95 bottles of fruit, which were worth in the winter at least one shilling each, so that there was a clear gain of 200 per cent.

Walcot-place, 20th Jan. 1810. PUBLICOLA.

OBSERVATIONS ON THE INCREASED PRICE OF ENGLISH WOOL, AND PRICE OF WOOL IN IRELAND.

IN the third volume of our Miscellany, page 233, we gave an account of the wool fair at Lewes, together with Lord Sheffield's sheep, and observations on the price of wool; and we now learn from several parts of the kingdom that all concerned in the manufacture as well as in the growth of wool declare the statement then made by his lordship to have proved in every respect perfectly correct, and that it has been highly useful in giving them just notions on that principal article of our manufacture and commerce. His lordship recommended moderate prices, in order to encourage the manufacturers to use South Down wool as a substitute for Spanish, against which they were prejudiced, not knowing how greatly within a few years the quality has been improved; and in answer to those who objected to the price he named for the fine wools, his lordship confidently foretold that the price would be much higher; and so it has already proved, for South Down wool, grown in several parts of England, has sold at 3*s.* 9*d.* per lb. A gentleman in Kent, who keeps about 300 ewes of that breed principally on artificial grasses, having only a few pasture fields, and no down, has sold at that price. In Sussex the price of fine South Down wools was from 3*s.* to 3*s.* 6*d.* per lb. Lord Egremont had the latter price, which was the highest for South Down wool. It is reported by the manufacturers to be of the best quality. His lordship had 4*s.* 9*d.* for his Ryland and Spanish.

In Ireland wool sold much higher: at the annual sale by auction of clothing wool grown in that country, it fetched as follows:—

English Currency.

Mr. Wynne,	South Down,	85	fleeces, sold at	7*s.* 10*d.* per. lb.
Do.	Do.	181	----------	5*s.* 5½*d.*
Mr. Symes,	Do.	96	----------	6*s.* 5*d.*
Mr. Grierson,	Do.	211	----------	5*s.* 6*d.*
Marq. of Sligo,	Do.	284	----------	4*s.* 10*d.*
Lord Clermont,	Do.	207	----------	4*s.* 8*d.*

Mixtures of Spanish and Ryland, and other fine wools, sold at inferior prices; and the average price of all the clothing wool when sold by auction, was 3*s.* 9*d.* per lb. Mr. Evans's pure Merino sold at 8*s.* 3*d.* per lb.

MEMOIR ON THE MAKING OF INDIGO.

COMMUNICATED BY A CORRESPONDENT IN NEW ORLEANS.

IT is known from observation that indigo dye is not formed out of the interior juices of the plant, but is composed of a gum which is entirely superficial; this gum is soluble in water, whether by the aid of an acid or an alkali has not been perhaps examined. The plant is macerated in a quantity of water sufficient to cover it, and passes through a fermentation analogous perhaps to the vinous fermentation. This plant, however, is not of that class which is susceptible of a fermentation productive of ardent spirits; far from being saccharine, its taste is austere. The liquor is now drawn off from the first into the second vat; it is nearly transparent, and of a very pale yellow; the liquor is agitated with some force in the second vat, and passes by this operation through the different gradations of colour to a deep blue; the liquor is then found to be filled with an infinite number of detached particles of indigo floating about in the water, but specifically heavier. Whether this decomposition is brought about by the volatilization of the salt that kept the indigo in solution, or its neutralization, by its union with fixed air, has not I believe been inquired into. Query, if the agitation may not assemble the particles of indigo into little masses by a mere mechanical effect, similar to the churning of butter? Be the cause what it may, it is often found that the decomposition is not altogether complete without the addition of a precipitant. Lime water is the most powerful hitherto in use with us; but any mucilaginous substance produces this effect, viz. the juice of the wild mallow, purslane, elm leaves, the human saliva, &c. &c.

It often happens that the period of the first fermentation cannot be ascertained; and if the liquor be suffered to stand until the second fermentation has made some progress, the indigo will be much injured, sometimes indeed half putrid; the quantity is also small, because the liquor has now acquired a new property, which enables it to suspend

the dye against the united efforts of all the precipitants; it remains of a cloudy green, has a smell of the putrid kind, and cannot by the common methods be made to discharge the dye.

Now the grand desideratum in making of indigo is to know the moment when the first fermentation is concluded, or at least a very short time after the second has commenced.

A scientific chymist will perhaps be able, after perusal of the above memoir, to direct such experiments as may lead to the discovery of a test which may solve this difficult problem.

ON IRON, AS A SUBSTITUTE FOR MAHOGANY AND OTHER EXPENSIVE WOODS IN ARTICLES OF FURNITURE.

From the Philosophical Journals.

MR. COOK first introduces some general remarks relative to the expensiveness of mahogany and some other foreign woods of which numerous articles of our furniture are made, to the abundance of iron which Great Britain produces, and to the necessity there is, in the present state of our political relation with other nations, to render this country as independent of all others as possible, by substituting native materials in the manufacture of our articles of constant use for those of a foreign nature; and adds, by so doing we should be gaining more real wealth than by the fluctuations and hazards of commerce. The first article of furniture for which Mr. C. proposes the substitution specified in the title is that of bedsteads: of these, he observes, "The posts or pillars, as well as the frame itself, might be cast hollow, beautifully wreathed up the posts with flowers, festoons, or clusters of fruit, or embossed with numberless fanciful ornaments, which the workman might touch up with his carver and chisel, to clear the foliage, &c. from the sand, and to make the flowers sharp and neat before they go to the finisher; the painter might colour them so as to have a more elegant appearance than it is possible to give to carved wood; and besides, they might be cast so light, and in such chaste symmetry, as cannot be accomplished in wood. Articles of this kind," he apprehends, "might be afforded at a much less price than those of carved mahogany are now sold for. Chests of drawers, bookcases, and bureaus might also be made of iron: after the first frames had been made according to any shape at pleasure, the pannels might be cut out of sheet iron to suit them, and the whole screwed firmly to-

gether when finished. Light iron frames filled up with wire-work and lined with silk, cloth, paper, or any other suitable material, might constitute the drawers, and would diminish the consumption of the kinds of wood now in use for that purpose. Such pieces of furniture, it is stated, would not be heavier than wood, and when elegantly japanned, painted, and polished, would be more beautiful, and would be a security to the property contained in them in case of any accident by fire. Another circumstance which is considered as a great recommendation of this substitution, is the conveniency it would afford in case of removal: by unscrewing the parts, they might be taken in pieces and put together again at a small expence, and the injury avoided which a large and valuable piece of furniture frequently suffers by being removed." Mr. Cook then observes generally,—"Indeed there is great scope here for ingenuity and improvement; it would give employ to vast numbers of men; it would consume our own produce, that is, iron; we should get an article that would endure for ages; and we should, in part, be independent of any other country for the material that forms a beautiful and useful ornament in our houses." He then enters into some further particulars respecting the utility of this substitution for the doors, shelves, &c. of libraries, and the advantages that would result from it in saving their valuable contents from conflagration; and also for the purpose of doors in general, which he conceives might be made light and elegant, and to last for centuries.

At the present price of mahogany, any substitute that can be used would be a desirable object; but it appears to us, that substitute must not be iron; it is true, from its nature for durability and abundance within ourselves, it certainly holds out a temptation; but there are many other points to consider before we would recommend its general adoption; and we have only inserted the foregoing paper as a stimulus to genius and invention for finding perhaps a better substitute than that of iron for wood. For it would be extremely injurious to the manufacturing class; for Mr. Cook is not correct if he means to assert that "it would give employ to vast numbers of men" more than at present employed in the different branches of furniture business; for those already employed in the cabinet manufacture would be proportionably diminished; and when the articles of iron were once made "they would endure for ages," as he observes; this very quality would be a mischief, as there being no wear and tear they would never want renewing.

A purpose for which iron might perhaps be substituted to a greater

extent than in that of furniture, is in the buildings of manufactories and even in houses: if those parts of a building which require large pieces of timber, as beams, rafters, joists, and supports, were made of iron cast hollow, it would greatly decrease the consumption of that expensive article.

ON THE INVENTION OF BRANDY, AND SINGULAR MODE OF MAKING IT IN SWEDEN.

THE time of the invention of brandy, or ardent spirit, which has had so wonderful an influence on many arts, on commerce, on the habits, the health, and happiness of the human race, is not exactly known.

That the first was made by the Arabians from wine, and thence called *vinum uslum;* that Arabian physicians first employed it in the composition of medicines; and that, so late as the year 1333, the manner of preparing it was very difficult and tedious, and still considered by chymists as a secret art, appear from the writings of Arnold, De Ville Neuve, Raymond, Lully, and Theophrastus Paracelsus; and it is without sufficient reason that some ascribe the invention to Arnold. Alexander Tassoni relates that the Modenese were the first who, in Europe, on occasion of too abundant a vintage, made and sold brandy in considerable quantities. The German miners had first acquired the habit of drinking it; and the great consumption of and demand for this liquor soon induced the Venetians to participate with the Modenese in this new art and branch of commerce. However, it appears that brandy did not come into general use till towards the end of the fifteenth century, and even then it was called *burnt wine*. The first printed book which makes mention of brandy, recommended it as a preservative against most diseases, and as a means to prolong youth and beauty. Similar encomiums have been bestowed on tea and coffee; and people became so much habituated to these liquors that they at last drank them merely on account of their being pleasant to their palate. William II. Landgrave of Hesse, about the beginning of the sixteenth century, ordered that no seller of brandy should suffer it to be drank in his house, and that no one should be allowed to offer it for sale before the church doors on holydays.

In 1524, Philip, Landgrave of Hesse, totally prohibited the vending of *burnt wine*. But in the middle of the sixteenth century, when

Bauius wrote his History of Wine, brandy was generally sold in Italy under the title of *aqua vitæ*. Under King Erick it appears to have been introduced into Sweden, and from thence into Denmark and Russia.

For a long time this liquor was distilled only from spoilt wine, and afterwards from the dregs of beer and wine; and when instead of these the distillers employed rye, wheat, and barley, it was considered as a wicked and unpardonable misuse of corn; it was feared that brandy made from wine would be adulterated with malt spirits, and an idea prevailed that the grains were noxious to cattle, but especially to swine, whence originated among men that loathsome and contagious disease the leprosy. Expressly for these reasons, *burnt wine* was, in January, 1595, forbidden to be made in the electorate of Saxony except only from wine lees and the dregs of beer. In 1582 brandy was prohibited at Frankfort, because the *barber surgeons* had represented that it was noxious in the then prevalent disorders; and this was again renewed by edict in 1605. Yet with such astonishing rapidity has the love of brandy and ardent spirit at present spread over all parts of the world, that nations the most uncultivated and ignorant have not only comprehended the method of distilling it, but have even had ingenuity enough to apply to the preparation of it the products furnished by their country. Malt spirits and French brandy, which, when both are pure, are however alike in their component parts, may with the greatest certainty be distinguished by the taste of what is left after burning them; of the latter, this watery remainder is sharp, nauseous, and almost sour; but what is left after burning the malt spirits excites a taste of burnt or at least roasted meal.

The following singular mode of distilling brandy in Sweden is taken from Consett's Tour through Sweden.

"In Stockholm, as in other cold countries, the custom of drinking spirits prevails rather too much; even ladies, who by no means deserve an improper epithet, comply with this pernicious custom. It is usual in this country, previous to dinner, for the company to assemble round the sideboard, and to regale themselves with bread, butter, cheese, or any other thing of that nature, which preface is regularly followed in both sexes by a bumper of brandy. This custom in the fair sex reminds me of a set of rules which I have seen for the regulation of a Russian assembly. It concludes with this remarkable injunction:—'N. B. Ladies are not to be drunk before ten o'clock.'

"Grain is not the only ingredient used in Sweden for the distillation of spirits. The low-priced brandies are made from rye and *oats*, a

species of insect very plentiful in this country. Upon inquiry I find that 'ants supply a resin, an oil, and an acid, which have been deemed of considerable service in the art of physic.' The ant used upon these occasions is a remarkably large black insect commonly found in small round hills at the bottom of the fir-tree. It is less to be wondered that they should use these insects in their distilleries than that they should eat them and consider them as highly palatable and pleasant. As I was walking with a young gentleman in a wood near Gottenburg, I observed him sit down upon one of these living hills, which, from the nature of its inhabitants, I should rather have avoided, and begin with some degree of keenness to devour these insects, first nipping off their heads and wings. The flavour he declared was of the finest acid, rather resembling that of a lemon. My young friend entreated me much to follow his example, but I could not overcome the antipathy which I felt to such a kind of food."

ON THE SUBSTITUTION OF CHAINS FOR HEMPEN ROPES;

WITH AN ACCOUNT OF AN IMPROVED MACHINE FOR RAISING COALS AND OTHER ARTICLES.

TO THE EDITOR OF THE TRADESMAN, OR COMMERCIAL MAGAZINE.

SIR,

As any substitute or adoption that can be the means of lessening the great consumption of hemp in this country, for which we are obliged to be indebted to foreign and precarious aid, must be desirable, if worthy of a place in your Magazine, which is intended for circulation amongst manufacturers and tradesmen in particular, I send you herewith a sketch of the improvements of the machines in use for raising coal and ore from the mines, which has long been a desideratum of the Society for the Encouragement of Arts, Manufactures, and Commerce, and is taken from their Transactions, vol. 25, page 74, the invention of Mr. Gilpin.

The machines for raising coal and other articles in general are, from the increased expence of horse labour, worked by a steam engine attached to a crank of twenty-one inches radius, wedged on a shaft along with a fly wheel eleven or twelve feet in diameter, and pinion wheel of eleven teeth, which latter works in another of sixty-four teeth, on

the shaft of which is a plain cylindrical barrel from four to six feet diameter and nine or ten feet long. Some of them have barrels formed of frustums of cones (the perimeters of which are in the proportion of about five to four) united at their bases, and of various diameters. The axis of both kinds are placed at right angles with the centre line of the pit, and at each end a rope of six inches in circumference is made fast by a staple, which ropes work in contrary directions at the same time over two pulleys placed in a frame parallel to each other, and at an equal distance from the centre of the pit; to the ends of these ropes the baskets of coal or ore to be raised are hooked.

The simplicity of their general structure is such as perhaps not to admit of any considerable improvement; but the forms of the barrels are very defective. On putting one of these machines in motion, each rope forms a triangle, the lines thereof, from the pully to the first and last coil, and the surface of the barrel, forming its three sides. Upon the cylindrical barrel the load always tends from gravitation towards the nearest point of contact with the centre of motion of the barrel, and in consequence the ascending rope at first bends around it in receding coils from the subtending side of the rectangle, diminishing their distances as they approach the nearest point of contact (where the rope crosses the centres of the pully and barrel at right angles), thereby leaving a great part of the latter uncovered by the rope, and hence the necessity of such long ones, afterwards coiling hard against itself as it aproaches the other side of the triangle, to its great injury in wear.

The barrels formed of frustums of cones united at their bases, the perimeters of which are in the proportion of about five to four, are equally defective on account of the rope, for the reason before mentioned, binding hard against itself, and even sometimes (in wet weather, when its rigidity is increased by absorption of water) folding at first in receding coils, and afterwards so hard against itself as to force those receding coils to slip suddenly towards the small perimeter of the cone, thereby making a large portion of the rope to descend the pit in an instant, breaking the rope by the sudden jerk, and frequently causing the immediate destruction of the men who may be ascending the pit at the same time, or dashing to pieces the basket and its contents.

Besides the unnecessary expence arising from the use of hempen ropes, and the breakage of chains, when applied in the common way, the forms of the barrels are quite erroneous in principle: some are cylindrical, others formed of frustums of cones united at their bases,

without any determinate proportion in their perimeters or regard to the weight of the rope or chain working thereon, both of which are absolutely necessary to acquire a maximum effect. The convex surface of a frustum of a cone is equal to that of a cylinder of the same altitude, having its circumference equal to half the sum of the perimeters of the frustum; and circumferences of circles being to one another as their diameters, the surface of a barrel formed of two frustums of right cones united at their bases, each sixty-four inches diameter at one end, thirty-two at the other, and fifty-four long, which is the size adopted by Mr. G. is equal to the surface of a plain cylindrical cone forty-eight inches diameter and 108 long; each will therefore bend the same length of cordage in an equal number of revolutions, and so far they are equal to each other, but they vary very considerably in the momenta required to work them.

Let a = the weight of the basket of coal, and b = that of the descending part of the chain, then on the cylindrical barrel, when the former is hooked to the end of the latter, and eased from the bottom of the pit, the opposite chain being bent on the barrel, $a + b$ = the counterpoise required at 24 inches radius, and when it is wound up to the top (the descending part of the opposite chain hanging down the pit), $a - b$ = the counterpoise required at the same radius.

On the barrel formed of frustums of right cones, when the load is eased from the bottom of the pit, and the chain is suspended from one of the smaller perimeters, the opposite chain being bent on the barrel, $\frac{a}{2} + \frac{b}{2}$ = the counterpoise required at 32 inches radius, and when it is wound to the top of the pit it is suspended from the large perimeter of one frustum, while the descending part of the opposite chain is hanging down the pit from the smaller perimeter of the other, and in that position $a - \frac{b}{2}$ = the counterpoise required at the same radius.

Consequently by supposing a, the weight of the basket of coal, to be 800 lbs. and b, the weight of the descending part of the chain, 400 lbs. we have the counterpoise required upon the cylindrical barrel at 24 inches radius, 1200 lbs. when the basket of coal is at the bottom of the pit, and 400 lbs. when it is at the top. But upon the barrel formed of frustums of right cones, the counterpoise required at 32 inches radius is 600 lbs. in each position. And as the counterpoise required is in inverse proportion to the length of the radius at which it is applied, we have 24 : 32 :: 600 : 800 lbs. the counterpoise required upon the barrel formed of frustums of right cones at 24 inches radius. Again, as the descending part of a chain + a bas-

ket of coal of double its weight, unbending out of equidistant grooves from the base of a frustum of a right cone towards its small perimeter, balances in every revolution of the barrel a chain of equal weight + a basket of coal of double its weight, bending into equidistant grooves from the smaller perimeter of a similar frustum towards its base, the counterpoise required must be equal in all parts of the descent.

So that, by making the weight of the basket of coal to that of the chain, and the perimeters of the frustums of cones which form the barrel to each other in the proportion of two to one, *a maximum is obtained by which a barrel of this description requires one-third less momentum (and consequently one-third less expence) to work it than a cylindrical one.*

The barrels are made by nailing two or three inch planks upon wooden or iron curves as in the common way, and afterwards folded spirally with wrought iron tire, so as to leave a vacancy of about half an inch between each fold, for the lower part of ellipsis of those links of the chain which work vertically to move in, and keep the coils at an equal distance from each other.

The wrought iron tire is of two kinds, the one for conical and the other for cylindrical barrels; the cross section of that for the barrel formed of frustums of cones is nearly a parallelogram 1¾ inch by 5-8ths. out of the upper part of which about ⅛ of an ellipsis is taken to form a horizontal bearing for those links of the chain which lie flat upon the tire; the cross section of the latter is a rectangle 1¼ inch by 2½, both are rolled into their proper form, and holes of a quarter of an inch diameter punched therein at a foot from each other, for the purpose of nailing them to the planking of the barrels.

As the method of working chains in grooves has only been in use about three years and a half, it is impossible to give a certain idea in respect to their durability. In all that time not a single link has broke, or the least accident occurred therefrom, though Messrs. T. W. and B. Botfield have nearly 3000 feet in daily motion at their manufactory. The wear has also been so trifling that I conceive they will sooner fail from oxidation than from attrition; for although the machines for raising coal and ore from the mines are in use twelve hours in the day, the brown oxide of iron formed upon the links by exposure to the atmosphere is seldom disturbed by the motion of the chain.

The method of folding wooden barrels with wrought iron tire does away the necessity of cast iron ones, and may be applied to every

wooden barrel now in use at a small expence, as may be seen by the accompanying estimate. There are now at work in the mines of this manufactory four machines with wooden barrels folded with wrought iron tire, one cylindrical, and three formed of frustums of cones, raising upwards of 800 tons of coal and iron ore per week, from pits of about 80 yards deep, and three others are in hand.

I look forward with confidence to the general substitution of chains for hempen ropes at all our mines and manufactories; a matter of importance to the British empire, as it will considerably lessen the consumption of British hemp, and render it more abundant for the exigencies of the navy.

GILBERT GILPIN.

Expence of tared Ropes for a Machine at a Pit 80 yards deep for three years and four months.

Ten ropes, each 110 yards long, six inches in circumference, and five lbs. per yard, 5500 lbs. at 8d. per lb. --	£183	6	8
Deduct ten worn-out ropes, 2750 lbs. at 1d. per lb. -----	11	9	2
Nett expence of ropes for three years and four months....	£171	17	6

Expence of Chains for a Machine for a Pit 80 yards deep.

Two chains, each 110 yards long, formed of 3-8th inch iron, 28 links to the yard, and weighing five lbs. per yard, 1100 lbs. at 6d. per lb. ----------	£27	10	0
180 yards of wrought iron tire with the holes punched therein, weighing seven lbs. per yard, at 1s. 6d. per yd.	13	10	0
540 nails for the tire, 27 lbs. at 6d. per lb. ----------	0	13	6
Workmanship of nailing on the tire 180 yds. at 2¼d. per yd.	1	17	6
	£43	11	0

The above chains and tire have been at work three years and four months, and do not appear to be one-fourth worn.

J. D.

ADVICE TO YOUNG TRADESMEN.

(*Continued from page* 13.)

The diligent hand maketh rich, PROV. x. 4.

NOTHING is more conducive to the success of the tradesman or man of business than his own diligence; it not only fills him with hope, but gives him credit with all who know him. Without application, no-

thing in this world will go on as it should do; let the man have the most perfect knowledge of his trade, and the best situated shop for business, yet without application neither of them will be of any avail. He that engages in trade, and does not resolve to work at it, is, to all intents and purposes, *felo de se*, and it is downright murdering himself; that is to say, in his trading capacity, he murders his credit, he murders his stock, and he literally starves (*which is as bad as murdering*) his family. Let it be observed, that the undertaking of a trade is not a sport or game, in which the tradesman is to meet with diversions and entertainments only, and not to be in the least trouble or disturbed. Trade is a daily employment, and must be followed as such, with the full attention of the mind and full attendance of the person; nothing but what are to be called the necessary duties of life are to intervene, and even those are to be limited so as not to be prejudicial to business. Since I have commenced speaking of the necessary things which may intervene, and divide the time with our business or trade, I shall state, in a few words, how a tradesman may either give to or take away too much from any respective part of what may be called his proper employment, and thus keep a due balance of his time as he should of his books and cash. The purposes for which time is given and life bestowed are very numerous; no time is given as useless and for nothing; time is no more to be unemployed than it is to be ill employed. Three things are chiefly before us in the allotment of our time, viz. first, necessaries of nature; second, duties of religion; and thirdly, the avocation of our trade or profession. Among the first may be reckoned, eating and drinking, rest or sleep, and in case of illness a recess from business, all of which should be referred to their proper seasons, and used with moderation.

The duties of religion are also necessities of their kind, and however essential they are, yet they ought to be kept in their places too; for a man may be a pious and religious tradesman without neglecting his business to run after chapels and field-preachers. Although the duties of life must not interfere with each other, yet it is certainly the duty of every Christian to worship God, and to pay the proper homage both morning and evening to his Maker.

But the duties of nature and religion also have their particular seasons, and those seasons so proper to themselves, and so stated, as not to intrench or break in upon one another, that we are really without excuse if we let any one be pleaded for the neglect of the other. Food, sleep, rest, and the necessities of nature, are either reserved for the night, which is appointed for man to rest in, or take up so little room

in the day, that they can never be pleaded as a bar against religion or employment.

But this is such an age of gallantry, gayety, and extravagance, that never, does it appear, was the city transposed to the court end of the town as it now is. The play-houses, balls, and masquerades are now filled with citizens and young tradesmen instead of gentlemen and families of distinction. And rare it is to see a shopkeeper with an apron on, even in his business, as formerly.

And what is the difference in the consequences? In those days when tradesmen kept within their sphere, acts of grace for the relief of insolvent debtors were not so common as at present, nor did you hear of so many commissions of bankruptcy in every Gazette; in a word, whether you take the lower sort of tradesmen or the higher, where there was one that failed in those days I believe I may say without exaggeration that there are 500 now. But this is an age of pleasure, drunkenness, and extravagance, by which thousands are ruined; and yet, among all these vices, nothing ruins a tradesman so effectually as the neglect of his business. Without diligence a man can never thoroughly understand his business. Application to trade and business teaches a person how to carry it on, as much as going apprentice taught a person how to set it up.

Now, in order to make a person earnestly to pursue the business he is engaged in, there is yet another thing necessary, viz. that he should delight in it. To delight in business is rendering it pleasant and agreeable, and this, according to Solomon, makes him certainly rich, raises him above the world, and renders him able to instruct and encourage those who come after him.

There is an old observation, and a very correct one, that there are more tradesmen undone by having too much trade than by having too little. Over-trading in business has the same effect as over-lifting to a strong man; such persons, vain of their strength, and endeavouring, through vanity, to put it to the utmost trial, at last lift up something too heavy for them, overstrain their sinews, and are rendered cripples ever after. For a young tradesman to overtrade himself, is like a young swimmer going out of his depth, and if help does not come immediately it is a thousand to one but he sinks and is drowned.

All rash adventurers are condemned by the prudent part of mankind; but it is as hard to restrain youth in trade as it is in any other thing, where the advantage stands only in view, and the danger out of sight. The profits of trade are baits to the avaricious shopkeeper, which often run him into ruin.

For want of consideration, the tradesman often drowns within his depth; that is, he sinks when he has in reality the substance at bottom to keep him up, and this is generally owing to an over-adventurous spirit, and the love of gain.

There are two principal things in trade which may very properly be applied as *over-trading*, which are both equally fatal in their consequence.

First, Trading beyond stock or capital; and secondly, giving too long credit.

A person in trade should consider and measure well the extent of his own strength, his stock of money, and credit in his beginning; for credit is his stock as well as money. He that takes too much credit is really in as much danger as he that gives too much credit; and the danger lies particularly in this, if the tradesman over-buys himself, that is, purchases on credit more stock than he has a market for, the payments perhaps become due too soon for him, and the goods not being sold he must answer the bills upon the strength of his proper stock, that is, pay for them out of his own cash; and if that should not hold out, he is obliged to put off his bills after they are due, or run under the disadvantage of a discount. This impairs his credit, and when he comes to deal with the same merchant or tradesman again he is treated like one that is an indifferent paymaster; and in the other case, of discount, it considerably impairs his gain; so that loss of credit is most strictly loss of money.

A tradesman, therefore, especially at his onset in business, ought to be very cautious of taking too much credit; he had much better miss an occasion sometimes of buying a bargain, which is usually the temptation, than venture to buy a greater quantity of goods than he can pay for, by which he runs in debt, gets dunned and insulted, and at last ends in a *Whereas*.

Merchants and wholesale dealers are too apt to prompt young shopkeepers and tradesmen to purchase large quantities of goods, and take great credit at first, which is a snare that many a young beginner has fallen into, and been thereby ruined.

I know many tradesmen are fond of seeing their shops well stocked, and their warehouses full of goods; this is a snare to them, and induces them to buy in more goods than they want, which is a foolish as well as a fatal error, whether it lies in their judgment or their vanity, for except in retail shops, wanting a large assortment of goods, a well experienced tradesman had rather see his warehouse too empty than too full; if it be too empty, he can fill it when he pleases either by credit

or cash. But every thing depends on unshaken credit, and punctuality of the payment of all kinds of bills. Credit is stock, and if well supported, is as good as stock, and will be as durable. A tradesman whose credit is good, and who has always maintained it with care, will, in many cases, buy his goods as cheap at three or four months credit as others will do with ready money. He that keeps his credit unshaken has a double stock; that is, it is an addition to his real stock, and is often superior to it. Nay, I have known many considerable tradesmen in this city, who have traded with great success, and to a very considerable degree, and yet have not had one shilling real stock or capital of their own; but by the strength of their credit and reputation, being sober and diligent, and who have preserved their credit through cautious dealing and punctual payments, have gone on till the profits of their trade have effectually established them, and they have literally raised estates out of nothing.

But to speak farther of *over-trading:* the second danger is the giving too much credit; he that takes credit may give credit, but he must be exceedingly watchful, for it is the most dangerous state of life that a tradesman can live in, and he should make it a universal rule not to give so much credit as he takes. By the words *so much* must be understood, that he must either sell for shorter time than he takes, or in less quantity; the last is the safest.

In this great commercial country it is impossible for business to be carried on without a reciprocal credit both in a buyer and seller; but it is so nice an article that I am of an opinion, that as many tradesmen break with giving too much credit, as break with taking it.

But there are various other ways of over-trading besides that of taking or giving too much credit; and one is, the undertaking great projects and speculations out of the common tract of the plain tradesman; and another, by grasping at too many undertakings at once.

But the safe tradesman is he who, avoiding all such schemes and adventures, keeps close within the compass of his own affairs, sticks to his shop or warehouse, and confining himself to what belongs to him there, goes smoothly on in the plain track of his business, without launching into unknown oceans, and content with the plain profit of his trade or business, is neither led by ambition or avarice, neither does he covet to be greater or richer by such uncertain and hazardous attempts.

(To be continued.)

FRENCH EXPOSE ON COMMERCE, LITERATURE, ARTS, MANUFACTURES, &c.

WE have often occasion to refer to the situation of trade, commerce, and the arts on the continent, from which we either derive information or amusement, or perhaps satisfaction, on a comparison of them with our own. On this score, we now give the late Exposé of the French empire, as pronounced by the minister of the interior in December last, as far as relates to our plan.

Notwithstanding the flourishing speech, a few acknowledgments are given that all are not so prosperous as *the grand nation* would represent, the most conspicuous of which the reader will observe in italics; and comparison and judgment are left for him.

SCIENCE, LITERATURE, AND THE ARTS.

"Every species of encouragement is given to the sciences, to literature, and to the arts; honours, rewards, and useful employments are confided to artists that distinguish themselves; nothing is neglected. But the first of those memorable epochs, formed to excite the noblest emulation, is arrived; the decennial prizes are about to be distributed *by the hand of him who is the fountain of all true glory.* They would have been distributed this day could the jury have completed their labours. His majesty wished no species of merit, whether literary or belonging to the sciences and arts, to be unrewarded.

"The Museum of Natural History has been increased; that of the Arts has received new riches by the acquisition of the *chefs d'ouvre* of the Borgese Gallery.

AGRICULTURE.

"The propagation of the culture of improved wool has made new advances, arising in a great measure from the importation of Spanish and German flocks.

"Twenty thousand choice mares have been presented to the twelve hundred stallions collected in our studs and depots. Premiums have been distributed to the proprietors of the finest breeds. The cultivation of cotton in our southern provinces has hitherto afforded nothing but hopes, these have not been destroyed by the two extraordinary seasons of 1808 and 1809, and that is a great point gained. Attempts have been made to naturalize indigo. France produces grain and wine far beyond her consumption; as to wine of the first quality this has

been a well known fact: but our dependance on foreign countries for grain has always been considered as an established truth. How valuable then the experiment now making.

"*Some districts indeed find it impossible to sell their corn.* This is a momentary misfortune, but will be a source of security for the future! The scarcities most frequently depended merely on opinion; it was only requisite to enlighten this, and France, henceforth secure of producing an increase beyond her consumption, can no longer be in fear of want.

"The emperor has, however, devoted all his solicitude to the present circumstances; *exportation of corn is permitted from a great number of points of our frontiers,* both maritime and terrestrial, provided always that the price exceeds not certain rates in the neighbouring markets.

MANUFACTURES AND INDUSTRY.

"Industry increases the value of their materials, by manual labour, and frequently in proportions that may be termed infinite; it has constantly occupied the attention of government; but the effect of authority cannot be by a direct influence: encouragements granted, modifications introduced into the tariffs of the custom-houses, whether national or foreign, such are its meaning, and such are its measures. It has further watched with redoubled care over the School of Arts and Trades, at Chalons,* of which the good effects continue to be felt. M. Richard, Messrs. Ternaux, M. Obahampt, M. de Neustize, and many others, have continued in their valuable establishments a degree of activity, an organization, and means of improvement, which under them are worthy to be cited. They do honour to the nation, and contribute to its prosperity.

MINES.

"The mines conceal riches, which, without industry, would remain buried in the earth. A regulation for the mines, positive and clear, will be completed in the course of your session. Means for deriving from it the earliest benefits are prepared. France possesses a great number of valuable coal mines, which secure us from all fear of ever wanting fuel.

"Mines of copper, lead, and silver are now working; others are objects of search and experiment.

---

* Vide page 132.

COMMERCE.

"Commerce is employed generally in deriving the greatest possible advantage from the products of agriculture and labour. Ours undoubtedly suffers from the extraordinary state of affairs, which forming, as it were, two masses, one of the continent of Europe, the other of the seas, and the countries from which the seas divide us, leaves them without any permitted communication.—Nevertheless, the home consumption, in which a much larger number of individuals participate, since plenty (*l'aisance*) is known to classes hitherto strangers to it, and our connections with our neighbours maintain a great activity in a trade of barter. Our connections with the United States of America are suspended; but, formed by mutual wants, they will soon resume their course. Lyons beholds the prosperity of her manufactures revive; and receives the orders of Germany, Russia, and the Interior. Naples furnishes us cotton, which her soil daily produces with increased abundance, and which diminish the more distant importations.

ESTABLISHMENTS OF BENEVOLENCE.

"The emperor has ordered the establishment of *forty-two depots of mendicity*, and secured to them the necessary funds for their maintenance; thus will be healed the most hideous wounds of political states; thus the public manners and industry will profit by *a regulation which will snatch from misery and depravity a number of beings who seemed condemned to them without resource.*

"Several of these establishments have already been completed.

"His majesty has bestowed *immense benefits on those of his subjects who have suffered great calamity.* The banks of the Rhine had been ravaged by inundations: the inhabitants have received nearly a million either for indemnities, or to be employed in reparations and useful labours.

"The countries which have suffered by storms or fire have received succours. His paternal care has furnished a great number of cities with supplies of bark, which they have punctually received.

"Depots for vaccination have been established. They secure to families the certain means of never wanting an invaluable preservation, which useful and true friends of humanity have made known to all the classes of our numerous population."

After the great care that our neighbours are taking to impress the subjects of that vast empire with an idea of what the government is ex-

ecuting in their behalf, we must now say a few words concerning ourselves.

Although we make no boasting exposé of improvements, yet we are not without many that might fairly deserve a public notice; witness, the increasing docks of our great ports, canals cutting in various districts of the kingdom, defences constructed for its safety, and new roads for its convenience.

On the subject of agriculture and commerce, much might fairly be said of this kingdom without exaggeration. What has been affected in the improvement of wool is by no means generally known, and less so the very important change that has, within a few years, taken place with respect to the spinning of wool. Instead of wasting the time and labour of many thousands of starving wretches in the slow and tiresome operation of spinning one single thread at a time, when they might be so much more profitably and usefully engaged in the service of the farmer. This work is now performed by most ingenious machinery, impelled by currents or by steam, and by one single movement a thousand spindles are soon clothed with worsted yarn of the finest quality; indeed its excellence is so fully established that our richest stuffs, camblets, &c. made for the markets of Canton, Cadiz, and Lima, are now fabricated with this yarn, which fully answers the purpose of yarn spun by the hand (for which it is actually taken), and can be rendered on much lower terms. Prodigious improvements have taken place in the manufactories of Birmingham, Sheffield, Leeds, Manchester, &c.; and the theory of dyeing has made considerable advances. The Vigonia wool lately brought into England, promises, from its most beautiful texture, to be a valuable substitute in the hat manufactories; in the making of very light drapery for the ladies; together with hosiery, gloves, and shawls.

ON THE MANUFACTURES OF AMERICA, AND EMIGRATION OF BRITISH MANUFACTURERS.

IN our third volume, p. 226, we gave an extract from the statutes of 5 George I. and 33 George II. containing a caution to tradesmen, manufacturers, and artists in general, against the pains and penalties of being concerned in or conniving at any machinery, machinists, models, &c. of our trades being suffered to be exported abroad. And in the same volume, page 493, we demonstrated by various extracts from the continental journals the enticements held out by the enemy,

and enumerated the various articles of our manufactures in which they were deficient. And as a further caution against our deluded artists, or workmen being led away by their specious enticements, we gave the summary of a recent conviction at the Old Bailey, under the statutes above-mentioned.

We have once more to call the attention of the public at large to an evil, which, if suffered to exist, must eventually tend to the ruin of our British manufactures, by a superior and cheaper rivalship in the foreign markets; as a corroboration of which, we will lay before our readers the following copy of a letter from New York, which gives an interesting picture of the present state of the arts and manufactures of America.

"*New York, Jan.* 2, 1810.

"During the embargo our merchants of the northern and middle states, being shut out from the sea, have employed their capitals in the erection of cotton mills and cotton factories. Artists emigrating from Manchester, and other manufacturing towns in Great Britain, have been well received; they have settled among us, and some of them have acquired fortunes. They have instructed us in the construction of mills, and the requisite machinery for spinning cotton, upon Arkwright's principle. A cotton factory has lately been erected in New England, which commences its operations with a capital of two hundred and fifty thousand pounds. In Virginia another of equal magnitude is shortly to be erected. Numerous others upon a smaller scale are established in the New England states, and it is found to be a lucrative concern for the proprietors. The weaving is done in private families. When the cotton is spun by machinery at the factories, it is distributed among thousands of industrious families, who weave it into the coarser kind of goods. We do not as yet manufacture goods of a fine fabric. It is curious to see, among a people who have hitherto had so little taste for the mechanic arts, numerous factories suddenly spring up, filled with industrious youth of both sexes, and thousands of persons taken from the plough to follow the loom.

"Since neither Great Britain nor France will allow us to navigate the ocean in peace and security, we must endeavour to shew ourselves independant of both kingdoms, by encouraging domestic manufactures, which are, as some think, a more permanent source of wealth and strength to a nation than foreign commerce. Thus the rigorous decrees and orders which the belligerent nations have fulminated against our commerce, will in the end operate to the disadvantage of those kingdoms, and in consequence as much in our favour. They

will force the United States to become a great manufacturing nation, and to rival Great Britain in the arts. We have the raw materials of our own growth, cheap, and in abundance. Our sea island cotton has the best staple in the world, and has had a decided preference in foreign markets. We can now manufacture coarse goods almost in sufficient quantity for our own consumption, and the finer fabrics will follow, when we become a little more expert in the art of weaving. The establishment of manufactories on an extensive scale in our country will have a tendency to keep our youthful population employed in lucrative business at home; it will prevent many from engaging in a sea life, and many others from emigrating beyond the Alleghany mountains, where, when once settled, they are lost to our nation.

"These recent establishments will, no doubt, greatly injure the manufacturing towns of Great Britain. I should suppose it would be for the interest of the British government to grant us a favourable treaty soon. On this side the Atlantic we ardently wish for a good treaty, and lament the ruin of our commerce, as well as the sudden rupture of the negociations with Mr. Jackson. If Great Britain and France would permit us to employ our capital in agriculture and commerce as before, perhaps it would be more for our benefit, certainly it would be more congenial to our dispositions; for our habits are not naturally mechanical, and it is necessity alone, created by the suspension of our commerce, and consequent injury to agriculture, which compels us to embark in manufactures. I am sure that our inhabitants would prefer being engaged in their former agricultural and commercial pursuits."

ON THE BENEFITS TO BE DERIVED FROM A NEW MARINE INSURANCE COMPANY.

TO THE EDITOR OF THE TRADESMAN, OR COMMERCIAL MAGAZINE.

SIR,

TO you, who profess to be open to all parties and influenced by none, I mean with respect to trade and commerce, and through whose medium we can give a candid and impartial statement of facts relative to trade and business in all their branches, when other periodical works or daily papers are not devoted thereto, or else are retained by different partizans, I trust no apology is requisite to introduce the subject of my present letter.

Such is the system of monopoly at the present moment in this great

emporium of trade and speculation, that, let the merits of any fresh society or company, or even an individual, either as to improvement in the arts and manufactures, trade or commerce, be ever so great, they are sure to be cried down, even without a fair competition.

Hence the present alarm amongst the subscribers at Lloyd's, who, against common sense, insist that no other company or society of merchants should be permitted to infringe on their long triumphant (for want of competion) business.

If we look back at the trade and commerce as well as the shipping business of this nation, at the time they first received their charter, we shall find that, since that period, they have increased ten-fold; and is it right to suppose, that under such circumstances, the insurance of such a concern at present should be invested solely in one company as heretofore? It is a fact that can never be denied, that competition in the market only can supply the public on the best terms, and which is clearly demonstrated by the different fire-offices, life insurance companies, public breweries, &c.; and it is also obvious, that a new marine insurance company might be established on such a foundation as to be of material benefit to the trade of this country as well as to that of neutral nations, although it must be allowed it would be detrimental to the private interests of the present subscribers at Lloyd's. As for the foolish plea set up in several of the newspapers (who have been well paid, no doubt, in the cause), that the business of the company could not be carried on with facility, if similar ones were allowed to exist, they may just as well say, that the Bank of England is a hurt to trade, and that the business is not easily managed there. That the public stand in need of better terms, I believe no shipper of goods will deny; and only look into our courts of law, and see the daily causes of insurance brought on, and you will hardly find one instance in a hundred of a loss to the underwriter not being litigated, and to recover 100*l.* you must spend 50*l.* in law, after having paid a premium of 25 per cent. It is true, they will at present insure any thing, no matter the risk, but then they have an exorbitant premium, and rely on the lucky chance of some deviation from the contract, by an alteration in the course of the voyage, loss of papers, want of proof, misnomer, or any thing else that will make a plausible defence. I cannot help mentioning, at the same time, one of their public fears, viz. the change it will be likely to produce even in the politics of the city of London; how this will be affected, I think, cannot easily be pointed out; but if this was to happen, that there would be no loss in the change is the humble opinion of

MERCATOR.

DESCRIPTION OF THE SALT MINES OF AUSTRIA.

THE city of Wieliczka, in Gallicia, the salt-pits of which are to be possessed in common by the sovereigns of Austria and Saxony, according to the late treaty of peace between Austria and France, contains a parcel or parcels of miserable wooden huts, and scarcely any better buildings. It stands immediately over an enormous mountain of salt, which is covered by about twenty fathoms of earth. The mine is divided into three stories, one below the other; each is about 30 fathoms in height, about 2000 fathoms in length, and 400 in breadth. Insomuch that those who explore these mines affirm, that whoever would devote *six hours* every day to the examination of them, would employ six weeks in visiting the whole of these subterraneous vaults.

The value of the products of this mine is estimated at 300,000 ducats annually. Besides losing a moiety of this income, Austria loses the salt-pits of Hallein, near Salzburgh, which, with those of Berchtoldsgaden, yield 387,000 quintals of salt yearly.

From the shores of the Adriatic sea also a quantity of salt was procured every year; in 1805 Austria relinquished the salt-pits of Hall.

Notwithstanding these losses of mines of this valuable mineral, Austria is not destitute of salt springs. Not far from Wieliczka is the rich source of salt, Bochnia, which is of vast extent, though not more than twelve salt-pits have hitherto been in operation at the same time. This is still retained by the emperor. Besides the refineries of Wieliczka and Bochnia, there were in Gallicia fourteen salt works belonging to the sovereign, and two hundred salt works belonging to private proprietors, which produced 900,000 quintals of salt annually. Hallstadt and Ischel, at the source of the Fraun, in Higher Austria, furnished annually 660,000 quintals: the salt works of Styria furnished 154,000 quintals, and those of Hungary 800,000 quintals.

The wonders that had been reported, and by men of learning as well as by the ignorant, on the interior of these mines, were calculated rather to excite astonishment than to convey truth: this subject of natural history is in reality too curious and interesting to need exaggeration. While these mines were under the crown of Poland, access to them was readily facilitated to strangers; but when, by the partition of Poland, they were allotted to Austria, certain formalities were established, previous to admission. The counsellor of the mines was first applied to, his permission was taken to the keeper of the mine, the parties then wrote their names, qualities, and countries, in a re-

gister; after which, a coarse covering, not unlike the frock of our waggoners, was put on each visitor, and the chief of the miners took charge of the company.

The descent was effected by means of a very thick rope, coiled round a large wheel turned by a horse; this rope passed down a shaft about eight feet square, and reaching about 100 yards below the surface. The four sides of this shaft were lined by rough trees, in order to prevent the falling in of the earth on the sides; for indeed this earth is but a sand, to which succeeds a very brittle clay, interspersed from space to space with layers of calcareous spath, of three or four inches in thickness. This bed of sand is followed by others of argillaceous earth, more or less coloured; but ordinarily of the colour of rusty iron. On the thick rope above-mentioned are tied at intervals stout cross-bars, on which the person sits, a kind of loop passes over his knees, and another over his back; he lays tight hold of the rope, and is lowered to the first landing. Several persons are lowered at the same time, one over another. There are four stories or floors of salt, with streets, &c. From the first story to the fourth, in descending, there are stairs nine or ten feet in width.

The first story presents a piece of architecture well entitled to attention: no less than a complete chapel, with all its ornaments formed out of the salt itself. It is dedicated to St. Anthony; is about thirty feet long, by twenty-four wide, and eighteen high: not only the steps of the altar, but the altar itself, the twisted columns that adorn it, and support the vault, with every ornament of the chapel, the crucifix, the statues of the virgin, and of St. Anthony, with another the size of life representing Sigismond, are all of salt; the latter is remarkably transparent. Not far from this chapel is another dedicated to our Lady; and about sixty paces from this, is another dedicated to St. John Nepomucendo. On certain days in the year mass is said in these chapels in memory of events which have occurred in the salt mines.

The miners give the name of *streets* to the alleys which they form in working, and by the aid of a little fancy, they find houses in these streets; hence the report of a city having been built and inhabited formerly in this subterraneous abode.

Further on is a stream of fresh water, which, filtering through a layer of argillaceous sand about four feet in thickness, runs along the mines. They affirm, that it passes through the enormous mass of salt without receiving any saltness from it: without that *addition* it is wonderful enough to find a stream of fresh water amidst the salt rock. It serves to water the horses; and the miners themselves drink of it.

In the galleries of salt are formed recesses where the miners deposit their tools when they quit the mine; to these they give the name of *houses*. The deeper the workmen penetrate in these mines, the more abundant and the purer is the salt they obtain. If a few layers of earth or clay are found they are but small, and seldom more than two feet in thickness. No volcanic productions have hitherto been found in these mines; neither sulphur, bitumen, nor coal, &c. as in some others. Many shells are found: principally bivalves and madrepores.

The air is wholesome in this deep abode, the galleries are formed with great attention to preserve a communication with the external air. The workmen enter in the morning and withdraw in the evening; they do not descend by the wheel, as that would take up too much time, there being usually 1200, and sometimes 2000 of them; they have ladders, stairs, &c. The horses never quit the mine while capable of labour; their stables and racks are all made of the salt; they are employed to draw loads of salt from place to place, to turn the wheels in the shafts, &c. It is certain, that after a short stay in this confinement they lose their sight.

These galleries are propped with the utmost solicitude: if any suspicious appearance of giving way be observed in any part, the support is immediately increased. No timber grows in the neighbourhood of the mine; this article occasions a great expence. To diminish this expence, the administration of the mines endeavour to substitute pillars of brick and mortar; but those failed in no great length of time, while the timber has lasted for ages. During the whole time that the mine of Wieliczka has been worked, no considerable obstacle has interrupted the operations. The draining water is carried by wooden troughs placed throughout the mine to a reservoir, whence it is drawn up in buckets made of the skins of oxen, and discharged. In dripping from the tops of some of the galleries, it has produced stalactites of surprizing magnitude and beauty. The miners remark with astonishment, that this water dissolves not an atom of salt thrown into it, whether in a lump or in powder, as one of their streams of fresh water does. No doubt but it is already saturated; and indeed, before the scarcity of wood was so great as it is at present, this water was evaporated to procure the salt it contained.

The house of Austria was too jealous of its property in these mines to suffer their extent to be known, or any plans of them to be taken. It is, however, suspected that they connect with those of Bochnia, distant about five miles eastward, where salt of the same kind is procured; and it was formerly the custom in the mines of Wieliczka to

dig salt in the direction of Bochnia; and in the mines of Bochnia to dig in the direction of Wieliczka.

The manner of obtaining the salt is thus: the master miner marks the dimensions of a block of salt; usually eight feet in length, four in depth, and two feet in thickness. The miners then make a number of holes on one side, three inches deep and about six inches asunder; they next make a kind of groove half an inch deep, connecting these holes, and place iron quoins in each of the holes, which they strike gently with mallets. As these quoins penetrate deeper into the rock, the echo of the blows they receive resounds throughout the mine, and has a pleasing effect on the ear; when the block is ready to part, a crack appears following the course of the holes; a workman then thrusts in a wooden pole, and working it about, the block is heard to break off from its native bed. The greatest pleasure given by the miners to visitors is, to break off these masses whole: each man procures four blocks daily.

Crystals of salt are found occasionally, sometimes in small layers. These are carried to the secretary's office, where four clerks are constantly employed; and where, as in the chapels at first described, all the furniture, tables, book-case, seats, &c. are of salt. These crystals are formed into various devices, as crucifixes, chairs, coffee-cups, cannons mounted, watches, salt-cellars, &c. which are usually bought by visitors at no great price.

This mine has been worked to the depth of 65 or 70 fathom: it is thought the salt does not lie deeper. Some other salt mines are deeper: that of Torbax, in Transilvania, is 56 fathoms; Vizakna is 66 fathoms; Kolos 46; Izik 47; an old mine of Deks is 72; that at Ishler, on being bored, gave salt at 64 *stadels* (260 feet) below the lowest story then worked.

COMMERCIAL HISTORY OF THE ISLE OF BOURBON.

WE gave an account in our last number, page 173, of the British arms having taken the isle of Bourbon, in the Indian seas: as a description of that settlement at the present moment must be highly interesting, we have collected the following particulars, for the satisfaction of our readers.

The original name of that island was Mascarenhas, but for a number of years it was called by the French *Isle de la Reunion*. It is situated in the Indian Ocean, about 300 miles to the east of Madagascar,

and 40 French leagues to the south of the Isle of France. The shape is merely oval, being 60 miles long, 45 in breadth, and above 150 miles in circumference, and lies in long. 55° 30′ east, and latitude 20° 52′ south. At the period of the first voyages of the Portuguese in the Indian seas they discovered three islands to the east of Madagascar, which they named Mascarenhas, Cerne, and Roderigo; but finding that they did not contain either men or animals, the navigators neglected to make any establishment thereon. The more westerly one, viz. Mascarenhas, furnished a retreat for some French refugees, who had formerly resided at Madagascar, whither they had retired about the year 1665. The settlers first reared some herds of oxen and flocks of sheep, which they had brought with them, and cultivated such species of herbage as were adapted to the nourishment of those animals. However, in a short time they introduced European grains, vegetables, and fruit. The health, ease, and liberty which the first settlers seemed to enjoy, induced many of the seamen who occasionally touched at the island, for the purpose of taking in provisions, to join them.

In 1708 some plants of the Arabian coffee shrub were introduced, which multiplied astonishingly, although the fruit lost its fine original odour. The cultivation of the coffee plants, as well as the other branches of laborious employment, was assigned to slaves, who were introduced either from Madagascar or the coast of Africa. It was at this period that the island, beginning to assume an important aspect, received the name of Bourbon. M. Colbert, the then minister of France, perceiving that all those nations which traded with the East Indies deemed it necessary to form an establishment towards the southern extremity of Africa, for the accommodation of their trading vessels, settled a colony in the isle of Bourbon, and claimed it as a French settlement.

The island is divided into two unequal parts, one of which (the smallest) is called *the Parched Country*, on account of the sterility of soil; but the other division is said to be the most fertile spot in the known world. There are no plains here, but there is a great number of heights of gentle ascent, besides some steep mountains, separated by narrow valleys. The soil is, generally speaking, as fertile as that of Madagascar, and the climate much more favourable. The manners of the inhabitants are perfectly simple and unsophisticated; and, as at Madagascar, agriculture is in a very flourishing state. The oxen and sheep which have been transplanted from that island thrive so much the better, as care has been taken to introduce their native pas-

turage, viz. a species of grass called *fatak*. The principal productions of the soil are, wheat, rice, maize, coffee, tobacco, tamarinds, cocoa, gum benjamin, cotton, aloes, black and yellow ebony, the last species of which is much esteemed. There are no vines throughout the island; yet Lullier seems to think the climate and soil are well adapted to their cultivation. The mountains abound in a vast variety of game; wild horses are frequently to be met with, some of which are tamed by the inhabitants; and the lakes swarm with excellent fish. In 1763, it was computed that there were 8702 oxen, 4084 sheep, 7405 kids, and 7619 pigs, in the colony; since which time, these must be more than double.

The districts of St. Suzanne, St. Denis, and St. Paul, are the most considerable as well as the most populous parts of the island. St. Suzanne is cultivated to the very edge of the ocean, and it is here that tobacco is principally grown. The pastures of St. Denis are uncommonly fine, and covered with numerous flocks. Coffee is almost exclusively cultivated in the district of St. Paul. The wild coffee shrub grows spontaneous in the island of Bourbon, and upon it has been ingrafted the Mocha plant; at first this union did not produce the most felicitous offspring, but the perseverance of some of the inhabitants at length convinced the world that the French coffee of the island of Bourbon would soon supplant that of Mocha. In effect, from an analysis of it, and some experiments tried in France thereon, it appeared evident that the seed had become so perfectly naturalized to the soil of the island as not only to equal the Arabian coffee in the different effects attributed to the latter, but in some respects to surpass it by many degrees. This probably arose from the excellent mode of cultivation adopted by the inhabitants of the islands, and from the article not being kept so long at sea as that of Arabia, a circumstance to which many of the evil qualities of Levant coffee are justly attributed. The French company have for a considerable period employed a person at Mocha for the sole purpose of ascertaining every secret of the art of cultivating the coffee shrub as it is there practised. This sheme has proved so successful that the plantations of Bourbon become annually better and better; and it is not to be doubted that the settlers will soon carry the cultivation of this important article of merchandize to the very pinicle of perfection. The coffee shrub of Bourbon is nevertheless subject to a dreadful species of devastation. A sort of wood-lice infest the plantation, and injure the shrubs so materially as frequently to destroy entire crops in embryo. It has been observed in the island of Bourbon that each shrub annually produces a pound of coffee. The fruit

ripens here, and is gathered in a dry season, which gives it infinite advantage over the coffee of the West Indies, the latter being always gathered in the wet season. From the greater part of the trees which grow in the island of Bourbon, various precious gums exude. The trees of the island are generally lofty, well adapted for the construction of edifices, but are so hard and porous they are but ill calculated for the purposes of ship-building.

In 1763, the population consisted of 4627 whites, and 15,124 negroes; but the white population is now calculated between six and 7000, and the negroes near 20,000.

REPLY TO THE QUERY ON LIGHTING FACTORIES WITH GAS-LIGHTS.

TO THE EDITOR OF THE TRADESMAN, OR COMMERCIAL MAGAZINE.

SIR,

IN your XIXth Number (for Jan. last), page 62, a Querist wishes to be informed of the most simple apparatus necessary to be used for the above purpose, I have accordingly taken the liberty of sending a short account thereof; and at the same time, through the medium of your publication, which is a means of communicating the observations of trade, commerce, and the arts, between manufacturers and tradesmen, however remote from each, not only for their own intelligence, but the benefit of society at large, I could wish, if any of your correspondents would take the trouble, to be informed why gin made in this country, is so different from that made in Holland, as it is generally believed that all the flavour and virtue of the true *Hollands Geneva* is derived solely from the juniper berry, which we import from that country, but to no effect as to answering the ends desired, none of the gin of British manufacture being any ways equal to or resembling the Dutch.

LEANDER.

METHOD OF PRODUCING GAS-LIGHT FOR THE ILLUMINATION OF MANUFACTORIES OR OTHER LARGE BUILDINGS.

THE coals are introduced into a cast-iron cylinder, placed on its side over the fire, by the circular base, which is even with the external surface of the furnace, closed by an air-tight iron plate, which is fastened by a screw in the centre. The inferior side of this cylinder is

protected from the fire over it by a larger half cylinder of cast iron, enclosed in brick-work, placed at some distance below it, by which means the heat is more equally distributed to the pit-coal.

A cast-iron pipe proceeds from the upper side of this cylinder to a cast-iron receiver, which is situated at the bottom of the well in which the gazometer rises and falls; in this receiver the tar and other condensible products are collected, and are extracted from time to time by means of a pump fixed to it.

From the top of this receiver proceeds another iron pipe, which reaches to the surface of the water in the well, but which is inserted into an air-holder of about 18 inches in diameter, and two feet long, made of iron. The lower part of this air-holder is pierced with holes, which serves a double purpose, first to divide the gas into several small streams, and thus to render it purer by washing it as it passes through the water; and secondly, it serves as a reservoir of gas, from whence the tar receiver, connecting tubes, and even the retort itself may be filled with gas whenever an absorption takes place, by the retort being cooled or otherwise. The gas is discharged from this air-holder into the gazometer, which is suspended over the well, and rises and falls therein, being balanced by two weights passing over pullies. This gazometer is made of wrought iron plates, luted in the seams so as to be air-tight, and well painted both within and without; it has an iron pipe made fast in the centre by means of two sets of stays, one at the bottom of the gazometer, and the other at the top. An upright pipe fixed in the centre of the well passes up the central pipe of the gazometer when it is depressed in the well. The gas is pressed out of the gazometer through a row of holes at the very top of the central pipe into that pipe, whence it passes into the centre pipe of the well, which is continued across the well, and up the side, and from thence is branched out to the lamps. Each of these lamps will consume about six cubic feet of gas in an hour. They are composed of two concentric tubes closed at bottom by an annular plate; the gas is introduced between them by a stop-cock on the side, and emitted for combustion by a row of holes in the annular plate which connects the two tubes at the top. To assist the combustion, the current of air that passes through the inner tube, is directed against the flame by a button at the end of a wire, which slides up and down the inner tube, and thus the button can be placed at any required distance from the upper orifice of the tube. This current is also determined from the flame, by the upper orifice of the inner tube being enlarged. A glass chimney

is also used, which is supported on an annular plate pierced with a row of holes to admit the air to the external surface of the flame.

A gazometer to contain 700 cubic feet of gas will weigh about 20 cwt. and cost about 2*l.* 10*s.* per cwt.

A complete apparatus for 40 lamps, each equal in light to ten candles of eight to the pound, and to burn for four hours, will cost about 250*l.*

ON THE ACTION OF LIGHT.

TO THE EDITOR OF THE TRADESMAN, OR COMMERCIAL MAGAZINE.

SIR,

OBSERVING the manner in which your former numbers have been executed, and that your plan is by no means limited, but on the contrary, admits of whatever is rare in the arts, or indeed in any other department of useful knowledge, I take the liberty of sending you a few ideas which have occurred, as connected with improvement, on the subject of light, which is well known to have singular effects on various metallic salts and colours. Some profiles were cut out with a penknife from a piece of paper, upon which they had been protracted or reduced from the respective shades in the usual manner; these were accidentally left exposed to the beams of the sun, upon another piece of paper which had been smeared with nitrate of silver in solution, after saturation in the muriate of soda, or common salt in solution; after some hours I found that all the *profile* part was beautifully blackened, whilst the margin was in *statu quo*, i. e. perfectly white, the paper being sufficiently opaque to prevent the access of the luminous fluid to any portion of the under paper, covered by the selvedge of the profile. A suitable varnish being afterwards employed, would, I presume, prevent any further action of light on the margin; and thus a miniature shade, actually tinted by the hands of Apollo, would be furnished of great durability.

Should this hint be thought worthy the attention of your numerous correspondents, and should the varnish be found preventive of the farther action of light, much advantage would accrue to the arts from the experiment.

P.

ON THE APPLICATION OF THE ARTS TO THE ECONOMY OF LIFE.

"*Presque tous les arts doivent leur naissance au hazard, ils ne sont en general ni le fruit des recherches, ni le resultat des combinaisons, mais tous ont un rapport plus ou moins marqué avec la chimie, et elle peut en eclairer les principes en reformer les abus, simplifier les moyens et hater leur progres.*"—FOURCROY.

TO THE EDITOR OF THE TRADESMAN, OR COMMERCIAL MAGAZINE.

SIR,

IT is perfectly well known to you that the sciences having been gradually advancing in this country, and lately with gigantic strides, particularly in some of the departments of transcendental chymistry, as we may perhaps, with no great impropriety, denominate the doctrine of the imponderable fluids, such as the matter of heat or caloric; the luminous fluid or light, (so called by Chaptal) in his Treatise on the Connection between Chymistry and the Arts, and that modification of the astonishingly penetrant and subtile principle of electricity, as modified under the denomination of the Galvanic energy or influence, out of compliment to its great originator Galvani, a professor of the physical sciences in Italy. Such, I assert, has been the rapid succession of discovery, that even the very men who have immortalized themselves by the success which has attended their pursuits, have taken time only to breathe and to admire, without waiting for the general and valuable application of facts to the economy of common life, the extension of domestic comfort, or what is equally important, the simplification and elucidation of processes and practices of art.

Impressed with these ideas, I cannot help regretting that more attention is not paid by commercial men to the improvement of such as are intended for the superintendance of manufactures, in the principles and present very advanced state of the physical sciences; I mean especially mechanics and chymistry; at the same time congratulating them upon the numerous opportunities which are presented, not only by the metropolis, but by several of the cities and large towns throughout the island; of the utility of which, Dr. Alderson's excellent paper, with which you lately favoured your readers, of the spirit of the gentlemen of Hull, is a memorable example.

When we consider what advantage has been already derived to different manufactures from chymistry, or rather from the co-operation of scientific chymists, we are only surprised that more should not be

done. The success which has attended the operation of bleaching by the oxymuriatic acid, which, though the *aqua solem solvens* of the alchymists, the only acid solvent of the noblest metal, gold, yet properly managed it wants the power to act upon any essential constituent of the most delicate fibre of cotton or linen; simply expending its energy, and crippling its activity by neutralizing, and nullifying every tint of colouring matter, fixed or fugacious. The manufacture of soap from alkaline salts, obtained heretofore at so costly a rate from foreign countries, at the expence of our own bullion too frequently, is now poured in such inexhaustible quantities from the chymical hoards of indigenous British products, as almost to render it desirable, for the more certain encouragement of persevering artists, that a law should be enacted, prohibiting all importation of alkaline matter, whether from friendly states, or countries inimical to Britain, and the effects of whose insolent decrees ought to have no other object than to rouse the sleeping energies of a people whose proper resources have been too frequently, by the timid or ill-informed, calculated upon, but not calculated upon as they ought. Do we not daily hear of the probable period being not far distant at which the whole of our coal will be exhausted? But surely such wise calculators have never beheld the almost endless sources which many parts of the island, as well as Newcastle-upon-Tyne and its neighbourhood, which, in the days of the celebrated mineralogist Jars, raised annually three millions sterling to their proprietors. Even fires at the Cape of Good Hope, and forges at Buenos Ayres have been fed by the coal of Britain—the pabulum of her naval strength.

In some instances the mechanical and chymical arts seem to possess such equal claims to attention as to divide the choice of the artist, and where this happens with respect to any new process in manufactures, we need not be surprised that the artist prefers that which had previously obtained, to a certain extent, repute. This seems to be the case with respect to the fluoric acid, which, though doubtless capable of many variations and improvements, is as yet but little practised in the large way. The lapidary's art seems to be at the same point or pitch as heretofore; and thus, since the days of Scheele, a discovery, fertile in its applications, and simple in its source, is in a manner laid upon the shelf.

The diamond which was first used for writing upon glass was not known as applicable in this way, at least as far as our researches inform us, until the sixteenth century; when Francis I. of France, who was fond of the arts, sciences, and new inventions, wrote the following lines, written with a diamond ring, upon a pane of glass:—

Souvent femme varie
Mal habil qui s'y fie.

The historian *Le Veil, die Kunst auf Glass zu malen,* recorded this fact, not so much on account of the admonition, as because it was then thought a very ingenious art to be able to write on glass.

In *Eirenæus Philalethe's* Exposition upon Sir George Repley's Hermetico-poetical Works, containing, as he says, the plainest and most excellent discoveries of the most hidden secrets of the ancient philosophers, we are assured that the ancients were far better acquainted with the different operations upon glass than the moderns; and that engraving or etching was not unknown, seems to be as plainly indicated in the following lines from Sir G. Repley's 4th Gate:—

——————— *all that would destroy*
Is banished from the king's palace, where
The streets with gold are paved,
The walls are silver fine, the gates most clear,
Entire gems engraved
With wondrous art; the window-glass most pure,
Which falls nor knocks can break;
The drink from fear of venom still is sure,
Whose virtue none can speak.

We cannot help lamenting that more has not been done with the promising art of etching on glass by the fluoric acid, so readily obtained from Derbyshire, in fluoric spar. Mr. Knight, of Foster-lane, has devised an apparatus for operating upon glass with this substance. And the Journal of Mr. Nicholson contains the process as employed by professor Wilson, of Glasgow, with a view to etch glass plates, and by setting them in plaster of Paris, allow of their being passed through the rolling press of the copperplate printers. The ingenious artist may be also referred for complete instructions for acquiring the art of etching on glass, gems, porcelain, and all silicious matters, to the Annals of Chymistry for 1790, vol. ii. page 141, which, on some future occasion, we purpose to present to our ingenious readers, with technical illustrations of different varieties. We shall conclude these observations with some lines equally poetical and just, describing every part of the operation of etching on glass, copied from the *Beau Monde:*

"Long had the nymph, in cubic walls immured,
The loath'd embrace of rugged lime endur'd;

Long had she sigh'd, and long implor'd in vain,
To clasp fond Silex to her breast again;
But he, seduc'd by Vitra's charms the while,
Hangs on her sparkling cheek with glist'ning smile,
His ancient love forgot. One summer day
Vagrant Sulphuria bent her wanton way,
In quest of gallants new: the Cacarar king,
Fann'd by the yellow beauties of her wing,
Fir'd with her glance, that spoke of love and joy,
Seiz'd the kind damsel, and relieved the coy.
From crystal bondage glad Fluoria flies,
And all her charms on truant Silex tries,
Nor tries in vain. Discarded Vitra now
Tears the rich bandage from her fretted brow.
Silex, Fluoria burn with equal flame,
And raise to SCHEELE a wreath of crystal fame."

See Beau Monde and Monthly Register for July, 1809.

I am your's, with respect,

EPSILON.

ON THE EFFECTS OF THE METAL DERIVED FROM THE ALKALI POTASH UPON METALLIC OXIDES AND METALLIC SALTS.

BY M. M. THENARD AND GAY LUSSAC.

From the Journal de Physique, 1809.

CONVINCED by innumerable experiments that it was impossible to obtain muriatic acid free from every other substance, we have traced the direct action of the metal *potassium* upon the muriates, in order to satisfy ourselves whether, under such agency, the acid would experience any change.

For this purpose we took muriate of baryt, fused and heated to the point of ignition; we pulverized and introduced it into a tube of glass, into which we had previously introduced a bullet of the metal; this was heated at the lamp, but experienced no change whatever, either when exposed to heat or cold; the metal came into contact with the salt in different directions without inducing any change whatever; besides, on throwing it into water, after the refrigeration of the matter, it deflagrated very vividly. Other alkaline muriates have not given us more satisfactory results. We have also submitted to the same proof,

and in like manner, the insoluble metallic muriates; such as the muriate of silver and *mercurius dulcis*: scarcely did the degree of heat applied exceed what was necessary to fuse the metal, than a very brilliant inflammation was excited, and the two salts were in consequence reduced. In both reductions the tube was fractured; and in that containing muriate of mercury there was a slight detonation, owing to the mercurial vapour. In these two cases there was merely muriate of potash formed, and we did not observe the slightest indication of the decomposition of the muriatic acid.

Despairing by such experiments to arrive at the decomposition of the muriatic acid, we endeavoured to ascertain the action of the metal *potassium* on other salts and metallic oxides, always proceeding in our experiments as above described. In all our experiments the heat was somewhat greater than what was necessary to fuse the metal. Sometimes, as for instance, with respect to the decomposition of the phosphate of lime, the sulphate of barytes, the oxide of zinc, &c. it was carried to 300° of the centigrade thermometer. The tubes which we employed were always fractured, during the inflammation, when most vivid. We shall confine ourselves, avoiding detail, to the statement of the results which we have observed.

Sulphate of baryt—Was decomposed without inflammation, and the sulphuret of baryt was obtained.

Sulphite of baryt—A lively inflammation, and formation of sulphuret of baryt.

We should conclude from these two experiments that oxigen is much less condensed in the sulphite than it is in the sulphate of baryt, and very probably less in the sulphurous than in the sulphuric acids.

Sulphite of lime.—Slight inflammation, with the formation of a very yellow sulphuret.

Sulphate of lead.—Very bright inflammation.

Sulphate of mercury slightly oxidized.—Inflammation, as in the case of *mercurius dulcis*.

Nitrate of baryt.—Brisk inflammation, and projection of the materials.

Nitrate of potash.—Destruction of the metal without inflammation, which is doubtless owing to the water contained in the nitre.

Super-oximuriates.—Inflammation very vivid.

Phosphate of lime.—Decomposition, without any appearance of inflammation; the phosphate being converted to a phosphuret.

Carbonate of lime.—Decomposition without inflammation; naked carbon being detached.

Chromate of lead.—A very lively inflammation.

Chromate of mercury.—Slight ignition. The mass was converted to a green.

Arseniate of cobalt.—Lively inflammation.

Tungstic acid, green and yellow.—Vivid flame.

Red oxide of mercury.—Lively flame. Slight detonation, owing to the mercurial vapour.

Oxide of silver.—Very lively flame.

Oxide of lead, gray.—Like the last.

Yellow oxide of lead.—Idem.

Yellow and brown oxides of copper.—Lively flame.

White oxide of arsenic.—Flame.

Black oxyde of Cobalt.—Ibid.

Volatile oxide of antimony.—Flame, but less lively than with the oxides of copper.

Oxide of antimony at a maximum.—Lively flame.

Oxide of tin at a maximum.—Very bright flame.

Putty of tin.—Flame, less lively than the former.

Red oxide of iron.—Very slight inflammation.

Black oxide.—No flame, but the iron was reduced.

Oxide of manganese at a maximum.—Very lively flame.

Oxide at a minimum.—No flame.

Yellow oxide of bismuth.—Lively inflammation.

White oxide of zinc.—Reduction without flame.

Gray oxide of nickel.—Considerably vivid flame.

Green oxide of chrome.—No inflammation whatever, but a production of blackish matter, which being completely cooled, and afterwards exposed to the air, takes fire, like good pyrophorus, and becomes yellow. This is a combination of potash and the oxide of chrome, which changes, on exposure to the air, to chromate of potash.

We have also traced the effects of the metal obtained from the vegetable alkali upon the earths, and particularly upon zircon, silex, yttria, and barytes; and we perceived that it was very obviously altered by each; but as the cause of this alteration is but little known, we will not, in this place, enter upon any inquiry on the subject; only we would add, that it is very probable that the phenomena which we have observed in burning the metal of potash in silicated fluoric acid gas depends in no respect upon the silex.

However this be, it follows, from all the preceding facts, that every substance in which we know oxygen to be present, at this day, are decomposable by the metal *potassium*; and that they almost all take place with the disengagement of light and coloric, and that the dis-

engagement is proportionate to the degree of condensation of the oxygen in each body.

These experiments having required much time, have prevented us from continuing the inquiries on the boracic acid, which we had instituted. We do, however, know that this acid may be decomposed at a high temperature by a mixture of carbon and iron or platina, and that borurets may be consequently obtained; for M. Descotils, on exposing similar mixtures to the heat of a forge, has obtained metallic buttons, which, when treated with the nitro-muriatic acid, gave him very sensible portions of oximuriatic acid, and which, according to our experiments upon the nature of boracic acid, could only be a combination of the basis of borax, platina, and iron.

ON THE ACTUAL SITUATION AND THE FUTURE PROSPECTS OF GREAT BRITAIN, AS AFFECTED BY THE NEW ORDER OF THINGS IN FRANCE, AND ON THE CONTINENT OF EUROPE.

TO THE EDITOR OF THE TRADESMAN, OR COMMERCIAL MAGAZINE.

SIR,

ALTHOUGH the following article has already appeared in print, that objection will, I trust, be more than counterbalanced by the importance of the truths it contains, in the present state of the commercial world, and is peculiarly adapted to appear in your valuable and widely extended Miscellany: by so doing I doubt not you will confer a favour on the majority of your readers, and particularly on

Yours, &c. Z. A.

HIS country involved in a long and awful contest, what British patriot but has with restless solicitude rehearsed parallel situations of past ages, to furnish himself with data by which to answer the solemn question:—*What will be the probable duration—what the issue of this strife for existence?* But untaught by history, the pages of which record no corresponding combination of events, he turns his anxious mind to their primary causes; he surveys the actors themselves of the momentous drama, perchance to trace a horoscope for his descendants in after-generations. With faltering steps he approaches the tripod of Futurity—a vail too ponderous for human powers to raise conceals the form of the mystic goddess. Not uncheering, yet dark and enveloped by

ambiguous conditions, is the reply to his eager inquiry. But his hopes are soon shaken, when around him he sees every attempt to stem the torrent of subjugation, not only fruitless, but followed by an increase of power on the part of the ambitious conqueror; states and rulers engulphed in one common vortex of destruction, and new empires created in vassalage to an inveterate foe.

In the midst, however, of all the political convulsions around him, *one* consolation has hitherto remained to every Englishman: his country has yet not only braved the storm, but by its assistance to the assailed, confined its ravages; nay, by its aid to the menaced, effectually protected them from the grasp of usurpation.—To judge how far it may be in our power to continue to protect ourselves and others, let us examine and poise both our enemy's power of annoyance and our means of resistance; let us impartially consider, what has England, what Buonaparte to fear from an indefinitely lengthened contest.

To effect the ruin of England, one or more of the following ways seem to be open for an attempt:—*Invasion,—Internal discontent and commotions,—Alienation of some of the most valuable of our colonies,—Annihilation of our commerce, and destruction of the credit and finances of the state:* each of which subjects, however closely some of them may be connected, it will be proper to consider distinctly.

With regard to invasion, the fears of the public, at one time so anxiously alive, are now so greatly lessened, as to render it doubtful whether a discussion of this subject, however brief, may not be deemed time mispent. But as the intent of these pages is not confined to the present moment, and as at a future time our enemy may choose to revive his threats, I prefer the reproach of having said too much, to that of having advanced too little on this head.

Suppose then for a moment we had no adequate naval or military force to meet such an emergency, it is perhaps not too much to say, that the present state of the continent alone, as embroiled and irritated by Bonaparte, will not admit his appropriating a force adequate to the conquest of our island. Germany, although once more, yet partially lulled into submission, can never be left without a numerous army of his best veterans; Spain, subdued or not, will require a force equally strong to insure its obedience to an usurped and highly unpopular government; Italy, Naples, and the new Illyrian provinces, although perhaps not demanding so large a proportion of French troops, can certainly not be entrusted to the defence of their unwilling inhabitants; and even the Dutch, particularly in case of a new and probably unwelcome change in their government, must, with all their na-

tive phlegm, be kept in awe by force. Nor will the title of mediator alone insure the obsequiousness of the Helvetic cantons. In short, dominion usurped by the iron hand of power, can only be maintained by means as violent. With these drains upon his military establishment, however gigantic, is it likely that the emperor of France can spare such an army as the subjugation of England would require? or are we pusillanimous enough to deem one of his *corps d' armée*, an Oudinot's, or Bernadotte's, sufficient to deprive us of our liberty or property?

So much for the difficulties before the enterprise is even begun. But supposing all these were overcome, and a numerous and well appointed army marched to the coast, divided into three or four separate corps, and ready for embarkation from different points; where is the craft to transport soldiers, horses, ammunition, and provisions? where the ships of war to protect such an immense armament? To the latter question the valour of our navy happily furnishes us with the answer: —*In our own ports!* The French flotilla, therefore, must sail without protection, elude our fleets, or come over in a calm, rowed by the soldiers who are to fight us the instant they set foot on shore. To elude our fleets, when the points of embarkation are well known, and the points of debarkation easily to be foreseen, would require a star more lucky than the *Astre Napoleon*. And as to a calm, no doubt it might happen; but calms in our seas are not of such long duration as to ensure the passage from even the nearest part of the enemy's coast, much less from such of the more distant points as it would be necessary to select for the different corps composing the expedition. In all probability, therefore, some, if not all of its divisions would have to encounter our fleets on their way, and should one or the other be *unfortunate* enough to reach our shore, their communication with France would immediately be cut off by our ships of war, and unassisted by the remainder of their armament, nothing but unconditional surrender would be left to their option. Buonaparte, however lavish of the lives of his men, is too circumspect to trust the issue of so important an undertaking to the precarious duration of a calm.

But granting for once the possibility of the whole French force destined for our subjugation arriving safe on British ground, are we conquered by their *arrival*? Have we not a numerous army of regulars, whose superiority over the French in valour is proved by many a pitched battle? Will the heroes of Alexandria, Maida, Vimiera, Douro, Talavera, &c. display less skill and bravery on their native soil? Have we not a numerous militia, well trained and disciplined, and in most respects equal to our troops of the line; and, besides those, an im-

mense body of volunteers, whose courage, patriotism, and hatred of the French name would supply any want of experience or defect in tactics? Would not, in short, every Englishman capable of handling a musket, or even a pitchfork, prefer fighting for his existance, to a tame submission to a detested tyrant's yoke? The recent events in the Tyrol and Spain must have taught the usurper how difficult it is to subdue a whole people; they ought to teach other nations the important truth, that the unanimous resistance of a whole people can do more than mercenaries passively engaged in the maintenance of their sovereign's broils. But how different would our own case stand from that of the brave Tyroleans, or the Spaniards! The former, although every thing that is noble and brave, are but a handful of mountaineers. The latter, through the indolence of their government, had sunk into apathy, their energy was gone, the martial spirit of their ancestors, known only from history, had evaporated; the flower of what army remained to them, had perfidiously been enticed to the distant shores of the Baltic, when, by the most gross and unparalleled treachery, they were taken by surprise, and had, unwarned and unprepared, to rise up against an enemy, who, through the folly of their government, was brought into the very heart, nay, to the remotest limits of the country, and who, by treacherous arts, had already seized on their strongest fortress. Yet, under such disheartening circumstances, did the Spanish nation attempt to assert their independence; and although more than once checked in their glorious efforts,—their inexperience in military affairs and want of discipline being opposed to the consummate tactics of skilful generals and veteran troops,—still, at this moment, after an interval of nearly two years, do they maintain the struggle, and, notwithstanding repeated reverses, still occupy more ground than at the outset of the contest. The English nation, on the contrary, would have to labour under none of these disadvantages; she would be timely apprised of her foe's intentions; no such treachery would avail; her army, her population trained to arms, would be ready to dispute every inch of ground, if the very first encounter should not suffice at once to destroy the daring invader. From French invasion, therefore, under such multifarious impediments, with such great odds in her favour, England, in my opinion, has to fear least of all the schemes which Buonaparte may adopt for her destruction.

The next cause which may render us incapable of resisting effectually our enemy would be disunion at home, and the whole train of evils attendant on civil discord. However alive we may be, and ought to be, to the danger arising from a division in our councils, or discon-

tent among the people at large, we have, what we had not fifteen years ago, the moral certainty, that the infection of French revolutionary doctrines, and consequently the influence of France on our internal politics, has entirely ceased. The short-sighted enthusiasts who dreamt of a golden age of liberty from the pompous theories of French closet-philosophers, are long ago waked by the groans of millions immolated or enslaved by the monstrous offspring of their adored Revolution. Happily also has the mass of the people of England, with very few exceptions, taken a salutary example and warning from the fate of our unfortunate neighbour, and hitherto been deaf to the crafty insinuations of a few individuals, who, under the cloak of constitutional reform, aim at nothing short of a total dissolution of our government. It is not too much to assert, that the loyalty of the people of England, and their attachment to their sovereign, are at this moment greater than at any former period of equal difficulty, if ever such a period existed. In Ireland, likewise, tranquillity and order have succeeded the violent commotions which a few years ago threatened to sever it from the parent country; and, ere long, probably the period will arrive, when the practicability of an equal dispensation of the privileges enjoyed by the rest of his majesty's subjects, coupled with an improved system of education of the lower classes, will consolidate the repose and happiness of that important portion of the empire, and double its value to Great Britain; a measure daily becoming less objectionable from the approaching extinction of the papal power. On this point, therefore, we see no ground for fear.

Nor have we any cause for apprehension as to the security and stability of our colonies. Our old West India islands, as well as those which we have taken from the enemy, are sufficiently protected both by our fleets and by strong garrisons; and whatever may be Buonaparte's plan, or rather wish, in regard to our possessions in the East, supposing no other obstacles in the way, he is too much embroiled and committed in Europe, to detach an army strong enough to arrive, after a destructive march of many thousands of miles over deserts and across hostile countries, in sufficient force on the borders of the Indus, to cope with our numerous battalions of English and native troops in India. But this crusade, the relish for which Napoleon's disastrous and disgraceful siege of Acre ought for ever to have spoiled, is absolutely impracticable without the concurrence of Turkey and Persia, the friendship of both of whom, it must be owned, he made extraordinary exertions to obtain, all which the wisdom of our own government succeeded in rendering completely abortive. A close alliance

subsists between Turkey and Great Britain; and the costly and numerous embassy lately sent by France to Persia, under General Gardanne, accompanied by upwards of 1400 Frenchmen of every military rank, from the general to the serjeant, not only was sent out of the country with every mark of disgrace, but a Persian ambassador actually dispatched to London, to cement more closely an alliance which naturally must prove highly advantageous to both nations. The Turks and Persians are not perhaps so easily imposed upon by the pompous declamations and tirades, borrowed, as occasion requires, by the ruler of the *grande nation* from the obsolete dictionary of the republic, as many of our European governments have been by repetition of his cant phrases. Formerly, it was the *liberty of mankind*, which was generously offered by the great nation to all the universe. Now that they groan under the yoke of a foreign tyrant, it would rather be out of character to make use of the old bait. Instead of the liberty of *mankind*, therefore, it is now the *liberty of the seas* for which the French have stood up as champions, and which they most liberally promise to all those that will pay with the price of their national independance, and the ruin of their trade, for that piece of "*bear's skin.*" And as an earnest of his sincerity to procure that blessing for the governments and people of the continent, he sets out with excluding them from all commerce, shutting their ports, and sending legions of half-starved and rapacious *douaniers*, to watch that the *liberty of the seas* be not infringed by the sailing or arrival of any vessel; for, like many a doctor who scruples not to tell his patient, "You will be worse before you are better!!" so does the genius of Napoleon know how to comfort the poor Germans, Dutch, Italians, &c. by convincing them, through a decree from Berlin, Milan, or St. Cloud, that the privations they now submit to are matters of temporary necessity, to bring England to her senses, and to destroy her "maritime monopoly."

The destruction of our commerce, it cannot be doubted, is one of the principal objects of Napoleon's wishes. Hitherto, fortunately, this, like all others which he has entertained with regard to England, has remained a "pious wish" of his. We continue, as ever before, to supply the continent with colonial products, which, in the present state of society, have become necessaries of life to all Europe: by more indirect channels, it is true; yet who pays for the additional expence of this circuitous intercourse but the merchants and people of the continent! who, in spite of the most rigorous penalties, venture to come themselves to our depôts to purchase our merchandize. Indeed, the risk they run is almost merely nominal. From the French general, to the

lowest searcher, all are to be silenced by regular and rated bribes; and bribery is reduced to so regular a system that their presence seems to have no other object than that of exacting an enormous per centage upon every article of import. They themselves openly ridicule the folly of their master in attempting to exclude British commerce from the continent. The effect of Buonaparte's measures, therefore, has totally failed. We not only trade with the continent, to perhaps the same extent as before, but new channels have, since his sway, and in consequence of it, been opened for our manufactures. Spain, its Trans-Atlantic colonies, and the Brazils, have given new energy to our manufactures; and will, when once the principles of mutual commercial commerce are regulated, prove a most valuable *debouché* for British wrought goods. Persia, also Turkey, the Levant, and Sweden, are in direct traffic with England. Under such circumstances, it may fairly be asked, what has British commerce to fear from the impotent anger of her enemy? But to convince every one that the above observations are something more than declamation, let him compare the recent revenue of our customs, the best test of the prosperity of trade, with that of former years; let him contrast the immense fortunes gained last year by many houses in the city, with the small number of important bankruptcies during the same period, and he will have no cause for commercial despondency.

The destruction of our finances and public credit is another string to the long bow with which Buonaparte aims his darts at the existence of Great Britain. Let us coolly investigate his chance for hitting the bull's eye. The drift of his thoughts, as far as they may be gathered from his occasional answers on the imperial throne to his good city of Paris, and to other corporate bodies of his good people (good they certainly must be, with a vengeance!) and as far as they are manifested by the pompous *exposés* which he annually presents to his good people, by way of a Christmas-box or new-year's gift, may be concentrated thus:—"Frenchmen, notwithstanding the expensive wars which I have been under the necessity of carrying on continually ever since my accession to the supreme power, in order to raise the French nation to the exalted destiny, which, in the vastness of my conceptions, I have prepared for her; notwithstanding the greatness of the public works and monuments by which the era of my government is intended to be handed down to posterity; notwithstanding the enormous pensions which the fulfilment of those destinies renders it necessary to grant to the holy father and sundry kings, now captives in my empire, as also to my imperial consort, who has immolated her affections to her love

of the French people, in order to bless the rising generation with an offspring of myself,—an object which, although doubtful in the eyes of many, I shall find means, one way or another, of accomplishing in the time prescribed by the inscrutable laws of nature; notwithstanding all these great drains on my imperial treasury, the revenues of the empire, assisted by the contributions levied on my enemies, have been sufficient to meet the expences of the state, without any loans; and by a wise administration of the finances, availing itself of the superfluous property of dependant neighbouring nations, will enable us to continue the war against the enemy of mankind to an unlimited period of time, or so long at least till the ruinous system of her finances of itself bring on her own destruction: for England, already overwhelmed by an enormous national debt, must, by a continuance of the war, add new loans to that debt, until it will no longer be in her power to discharge the interest alone, when a national bankruptcy must inevitably ensue, and create such a convulsion in the government, and such confusion and disorder in the nation, that they themselves will be obliged to have recourse to the genius of Napoleon to adjust their affairs. Then, if not before, will their eyes be opened to receive the French nation on their shores, to give them a stable government, and that liberty, of which hitherto they have known nothing but the name."

Such, we know, is the picture of our affairs which the *logique Napoleonne* condescends to exhibit to the intellects of our neighbours; and our surprise ought not to be great to see *them* acquiesce in the force of their master's arguments. But to meet with Englishmen, however few their number, who can be wicked enough to disseminate, or weak enough to listen to similar reasonings, excites astonishment. To such of my countrymen, therefore, as may be tempted to be led away by their insidious insinuations, a word or two spoken in time may be of service.

Our national debt, it is true, is enormous; it is no less true, that the immense exertions called for in a contest with an enemy, whose injustice and want of all principle open him resources to which, thank God, the British government has ever been a stranger, require, and will require, besides our personal sacrifices, new loans every year such contest may continue. But, happily for us and our posterity, the wisdom of our legislature has provided a remedy for this disease: I allude to the Sinking Fund, proposed by that great statesman, Mr. Pitt, and adopted by parliament; an establishment which, when well understood and appretiated, must at once dispel all fears of national in-

solvency, and endear the name of its author to the heart of every Englishman. One part of Mr. Pitt's plan, now in force, is, that one million shall be annually appropriated to the redemption of the national debt, which, operating by compound interest at five per cent. will in 100 years amount to 2610 millions; a sum which will appear incredible to persons not familiar with the astonishingly accumulative power of compound interest. To those, however, an inspection of the statement of the operations of the commissioners of the sinking fund, up to the 1st of November last, will carry the most practical conviction. At that time they had

Redeemed by annual million, &c.	£76,621,173
Do. on account of loans	81,894,641
Do. by land tax	23,384,963
Do. by 1 per cent. per ann. on imperial loans	1,007,033
Transferred for purchase of life annuities	919,913
Total	183,827,723

And the sum to be expended by the commissioners in the quarter ensuing, was stated at 2,893,877*l.* 11*s.* 9*d.*

Thus about one-sixth part of the whole of our debt has been redeemed in little more than 20 years; in fact, in the infancy of the sinking fund, and during a war of unprecedented length and expence. What may not consequently be expected from the future operations of this glorious establishment, the very nature of which is such, that its powers increase (as they have done hitherto) most rapidly with every year. And should *unforeseen* events render a peace practicable, then the total extinction of our debt will approach with hasty strides, supposing even that till such time the necessities of the state require large annual loans to be added to the mass of the debt of the empire: for along with every new loan a provision is made for its individual extinction. This admirable arrangement, likewise proceeding from the comprehensive genius of the son of Chatham, is equally simple and sure in its result. For every loan, one per cent. on the capital stock thereby created, is annually set apart to effect its extinction, which, although not precisely determinable in point of time, owing to the fluctuation in the price of our funds, may fairly be assumed to take place in less than 40 years.

Such, therefore, has already been the rapid accumulation of the sinking fund, that at this moment it might, if we chose, enable us to carry on the war for any length of time without borrowing any further

loans, by devoting the whole annual revenue of the sinking fund to the expenditure of government, and thereby suspending the operation of the redemption of our national debt, which thus would remain stationary, if such a measure were not deemed disadvantageous and impolitic.

These are the direct results of the sinking fund. But independant of those, we already derive from its past operations, and the confidence which the public entertains of its future effects, very essential indirect advantage. The steady rise in our funds may, in a great measure be ascribed to it. Our three per cents. are higher than at any time of the present or former wars; in fact they are not very distant from the peace price in 1802, and in all probability will very soon reach it. And since the price of our funds must be deemed the best criterion of the public credit, the latter certainly cannot but be admitted to be in a flourishing and daily improving condition.

Thus then all our apprehensions of a national bankruptcy from the overgrown bulk of the public debt must at once disappear; and trusting in the protection of this financial palladium, the sinking fund, every Englishman may look into futurity without dread. The public creditor need fear no interruption in the payment of his interest; and as to his capital, if there be any fear at all, it will be that of having it repaid to him before he himself wishes it: for, however paradoxical, it is perhaps not too much to assert, that supposing government became by some unexpected means enabled at once to discharge the whole of the debt, a general convulsion in the state of private individual property would most probably ensue, and produce consequences incalculably detrimental.

The above picture of the resources of our country, unless it be thought flattered by the partiality of patriotism, must, I think, carry conviction to every unbiassed mind, of our ability to resist all the attempts which our inveterate enemy may devise on our existence as an independent nation. Let us proceed one step further; let us see whether the means of offence we possess, if wisely put into action, do not hold out to us a fair prospect of terminating the present contest honourably, nay, victoriously.

Our opponent's means, it is not to be denied, weigh heavy in the scale. His power already is gigantic, it is increased by the tributary forces of vassal sovereigns, his ambition knows no bounds, his extraordinary activity, his comprehensive genius, his transcendant military talents, his age, his constitution, in fact, all we know of him, are so many objects of dread. His career has no parallel in ancient or mo-

dern history. Even the fabulous conquests of Sesostris fall short of his exploits. The petty usurpations of the Macedonian Philip do not equal in extent the portions of land Napoleon occasionally gives away to one of his creatures. The bold crusade of Alexander was directed against an empire enfeebled by oriental luxury. His mysterious death indeed, and the subsequent dismemberment of his hasty conquests, ought justly to be a matter of serious apprehension to Buonaparte. Sylla, Cæsar, and Octavius, reared their usurpations by civil wars; the latter stepped into the possession of an immense empire already formed, organized, and well secured. The savage laurels of an Attila or Genserick were easily gathered from an enervated race. Charlemagne, less barbarous than his northern neighbours, asserted over them his mental superiority, while in the south he united to his empire, governments already decrepit. The rapid conquests of a Tamerlane and Gengis-chan were achieved without a particle of political cunning. Charles V. the lawful heir of a powerful empire, increased his possessions by force of arms, without annihilating or expelling his foes. The madness and temerity of Charles XII. however dazzling in the outset, recoiled on his own head.

Notwithstanding the partial coincidence between some of the actions of the above-mentioned conquerors and those of the Ajaccian hero, yet how different his character, his general history! In the lowness of his origin, in treachery, ambition, restless activity, and perhaps in military talent, he surpasses them all. It is by these qualifications, by some strokes of good fortune, and, above all, by the languor and decrepitude of the neighbouring governments, that at this moment his sway is bounded on the east by the Save and Elbe; on the north, west, and south (taking a maritime circuit from the Elbe to Cattaro), by the German Ocean, the Atlantic, and Mediterranean; and, with "*semper ultra*" for the motto of his actions, it may safely be foretold, that these limits will extend themselves every year, nay every month. Turkey and Prussia most probably are doomed to fall the next victims. But, however paradoxical the assertion may appear, I shall maintain, that the internal strength of his empire will decrease in proportion to its further extension. His sway is over unwilling subjects; the homage of his feudal sovereigns is forced; arrogance of success has rendered him indifferent to the public opinion: the mask thrown off, every trait of his character, the whole texture of his ambitious and perfidious designs, stare in the face of the meanest capacity. Reaction begins to manifest itself in many portions of his dominion. Besides the resistance of the Spaniards, the tocsin of emancipation is already rung in

Germany by a people of primeval manners and warlike spirit, the great, the brave Tyrolese: their neighbours listen with rapture to the harmonious and welcome sound, but deprived of the same local advantages, they, prudently perhaps, bridle as yet their ardour to join in the concert of liberty.—Heroic race of mountaineers! what words can do justice to the noble sacrifices you are making in the cause of the world? What panegyric but would fall short of the deeds achieved by your valiant bands? What ought we not to do to support and aid a country, where the keeper of a village inn defies all the power of him before whom the successors of Frederic the Great, Peter the Great, and the great Maria Theresa, have successively bowed their necks? Britons, generous Britons! partake of their holy flame of patriotism, assist the god-like efforts of their noble despair, with but a thousandth part of the superfluities you gather and enjoy in ease and happiness, while the rest of the world groans under the miseries and horrors of war!!! Independent of these insurrections, many others have already taken place, though the venal or shackled presses of the continent durst not notice them. In Deux Ponts, Hesse, Franconia, Hanover, Paderborn, Suabia, Piedmont, Calabria, and in other provinces, the inhabitants rose in arms against their oppressors; and in the north of Germany in particular, nothing was wanting to give consistence, system, and probably success to opposition, but the impulse and support of a British force, or a victory gained by the Austrian arms. In the late doubtful contest with Austria, Buonaparte's fate depended much more on the issue of one battle than that of Francis. This assertion has since been verified by the peace of Vienna. In the battle of Aspern it required but another assault on the village of Esslingen by the whole mass of the grenadiers of Austria, whose voluntary offer was rejected by the generalissimo, from motives of ill-timed humanity: in the battle of Wagram, likewise, nothing was wanting but the justly expected arrival of the Archduke John's army; and the laurels of Lodi, Marengo, Ulm, Jena, and Friedland had been blasted at one blow; retreat, if at all possible, had been endless.

What then shall we say of the stability of an empire which is repeatedly staked on the issue of *one* battle? Fortune may long crown the rash efforts of a headstrong gamester; but if he have continually to play the same game over again, to risk his all on one throw, his chance of constant success must at best be deemed a desperate one. The latter is the very game of every upstart usurper; sprung from nothing, nothing has he to lose, all to gain. Next to this, another peculiarity distinguishes the warfare of Buonaparte. By his daring boldness, his

dern history. Even the fabulous conquests of Sesostris fall short of his exploits. The petty usurpations of the Macedonian Philip do not equal in extent the portions of land Napoleon occasionally gives away to one of his creatures. The bold crusade of Alexander was directed against an empire enfeebled by oriental luxury. His mysterious death indeed, and the subsequent dismemberment of his hasty conquests, ought justly to be a matter of serious apprehension to Buonaparte. Sylla, Cæsar, and Octavius, reared their usurpations by civil wars; the latter stepped into the possession of an immense empire already formed, organized, and well secured. The savage laurels of an Attila or Genserick were easily gathered from an enervated race. Charlemagne, less barbarous than his northern neighbours, asserted over them his mental superiority, while in the south he united to his empire, governments already decrepit. The rapid conquests of a Tamerlane and Gengis-chan were achieved without a particle of political cunning. Charles V. the lawful heir of a powerful empire, increased his possessions by force of arms, without annihilating or expelling his foes. The madness and temerity of Charles XII. however dazzling in the outset, recoiled on his own head.

Notwithstanding the partial coincidence between some of the actions of the above-mentioned conquerors and those of the Ajaccian hero, yet how different his character, his general history! In the lowness of his origin, in treachery, ambition, restless activity, and perhaps in military talent, he surpasses them all. It is by these qualifications, by some strokes of good fortune, and, above all, by the languor and decrepitude of the neighbouring governments, that at this moment his sway is bounded on the east by the Save and Elbe; on the north, west, and south (taking a maritime circuit from the Elbe to Cattaro), by the German Ocean, the Atlantic, and Mediterranean; and, with "*semper ultra*" for the motto of his actions, it may safely be foretold, that these limits will extend themselves every year, nay every month. Turkey and Prussia most probably are doomed to fall the next victims. But, however paradoxical the assertion may appear, I shall maintain, that the internal strength of his empire will decrease in proportion to its further extension. His sway is over unwilling subjects; the homage of his feudal sovereigns is forced; arrogance of success has rendered him indifferent to the public opinion: the mask thrown off, every trait of his character, the whole texture of his ambitious and perfidious designs, stare in the face of the meanest capacity. Reaction begins to manifest itself in many portions of his dominion. Besides the resistance of the Spaniards, the tocsin of emancipation is already rung in

Germany by a people of primeval manners and warlike spirit, the great, the brave Tyrolese: their neighbours listen with rapture to the harmonious and welcome sound, but deprived of the same local advantages, they, prudently perhaps, bridle as yet their ardour to join in the concert of liberty.—Heroic race of mountaineers! what words can do justice to the noble sacrifices you are making in the cause of the world? What panegyric but would fall short of the deeds achieved by your valiant bands? What ought we not to do to support and aid a country, where the keeper of a village inn defies all the power of him before whom the successors of Frederic the Great, Peter the Great, and the great Maria Theresa, have successively bowed their necks? Britons, generous Britons! partake of their holy flame of patriotism, assist the god-like efforts of their noble despair, with but a thousandth part of the superfluities you gather and enjoy in ease and happiness, while the rest of the world groans under the miseries and horrors of war!!! Independent of these insurrections, many others have already taken place, though the venal or shackled presses of the continent durst not notice them. In Deux Ponts, Hesse, Franconia, Hanover, Paderborn, Suabia, Piedmont, Calabria, and in other provinces, the inhabitants rose in arms against their oppressors; and in the north of Germany in particular, nothing was wanting to give consistence, system, and probably success to opposition, but the impulse and support of a British force, or a victory gained by the Austrian arms. In the late doubtful contest with Austria, Buonaparte's fate depended much more on the issue of one battle than that of Francis. This assertion has since been verified by the peace of Vienna. In the battle of Aspern it required but another assault on the village of Esslingen by the whole mass of the grenadiers of Austria, whose voluntary offer was rejected by the generalissimo, from motives of ill-timed humanity: in the battle of Wagram, likewise, nothing was wanting but the justly expected arrival of the Archduke John's army; and the laurels of Lodi, Marengo, Ulm, Jena, and Friedland had been blasted at one blow; retreat, if at all possible, had been endless.

What then shall we say of the stability of an empire which is repeatedly staked on the issue of *one* battle? Fortune may long crown the rash efforts of a headstrong gamester; but if he have continually to play the same game over again, to risk his all on one throw, his chance of constant success must at best be deemed a desperate one. The latter is the very game of every upstart usurper; sprung from nothing, nothing has he to lose, all to gain. Next to this, another peculiarity distinguishes the warfare of Buonaparte. By his daring boldness, his

activity, his rapid movements, and, above all, by concentrating an immense mass of force at one point, *one* campaign, and in most cases, *one* battle terminates his wars. This mode, on the one hand, certainly dazzles and imposes upon his contemporaries; it confounds, and for a time benumbs his enemies. But the glare of the victor, as well as the consternation of the vanquished, is transient. A peace leaves the latter vanquished, but unsubdued; and the same war, in fact, is to be fought over and over again. Hence we hear of the pompous terms of a third, fourth, fifth, and more coalitions. Such a system of warfare has repeatedly been condemned by the admirers of the fortune of Napoleon; his Parisian sycophants declare it the effect of the conqueror's generosity. Let us give it the right name, it is the effect of necessity. While he is aware of the danger of forcing one enemy to measures of despair, which would rouse and develop unconscious powers, he for the gain of a slight sacrifice, compounds for a respite, in order to oppose with the same force, another foe whom his ambition has raised in another distant quarter. This has been the case recently in Germany, and such shifts his thirst after universal dominion will render more and more necessary. It is, therefore, rather to be hoped than feared that his plans upon Turkey, Prussia, and other European powers, may soon be put in execution. The greater his aggressions, the more divided his strength, the nearer his fall.

Austria, notwithstanding the loss of a small portion of her territory through the last war, has, by that effort, gained much more in another way. She has left the field with an army superior to any she possessed before; the charm of Buonaparte's invincibility is removed from the eyes of her government, her generals, her soldiers, and her subjects. Of the loyalty and filial attachment of the latter, she has had the most convincing proofs. The people of Germany have given an earnest of their disposition in her favour; among them, she has kindled a spark of patriotism and of love for liberty, which, however slow and latent, will, at the very first opportunity, break forth in a bright and vigorous flame, and consume its oppressors. Many instances might be adduced in proof of the latter assertion; one or two shall suffice. The Tyrolese deputies, on their journey through Germany, were, in every place where they made themselves known, treated by the inhabitants with the most distinguished respect; the Austrian prisoners, on their march to France, through the territories of even the confederacy of the Rhine, were by the inhabitants gratuitously supplied with food and every thing they stood in need of; thousands made their escape by finding a secret asylum in every peasant's cottage to which they fled. The landing of

a few English sailors at Cuxhaven last summer, was sufficient to stimulate the contiguous provinces to open acts of insurrection. At Brunswick, many of the brave youths who had valiantly, but unfortunately, risen in their country's cause, and fought either in Hesse or with Schill, were condemned by the murderous sentence of that Epicurean stripling, the youngest of the brood of Corsican vipers, and executed before the town; young men of the first families, of polished education, of high and honourable spirit! The next morning the graves of these martyrs of their country's cause were found decorated, by unknown hands, with garlands of flowers, bedewed, as we may well believe, with the tears of their surviving countrymen. Noble, but unfortunate descendants of Arminius, husband your efforts; suffer yet for a while, with feigned patience, the misdeeds of your tyrants; the day of retribution, the hour of deliverance, will appear: then, and then only, rush with simultaneous fury on the horde of barbarians who have dared to pollute your soil and your altars; who have even dared to marshal in their ranks the valour of your sons, to subdue, with their blood, your brethren and distant nations; and if all fail, remember that the arm of *one* of your patriots is enough to cut the gordian knot.

Next to Austria, and the German nation in general, the situation of Prussia demands a cursory glance. It is not here my intention to reproach that government with the mass of her political sins, or to bewail in this place the misfortunes which her own errors have brought on her head. All I have in view is, to ascertain how far her future conduct and the means still left her, may, in some measure, serve to aid the good cause at a future, perhaps not very remote period. It is only within these few months, that the reorganization of the Prussian army has been seriously commenced. The still existing regiments are recruited with the greatest diligence, according to a plan corresponding with the limited finances of that power. The regiments, although inferior in number, are the stronger in men; and of those, one-fourth part only is at any time in pay, and in the course of training; while the rest are permitted, till their turn arrives, to remain on furlough at their homes and occupations: thus exercising and training a regiment of 2000 men in the space of one year, although 500 only are at the charge of the treasury. This plan, together with the admission of plebeians to situations of any rank in the army, and the recent exemplary and severe punishments inflicted on the cowards or traitors in the last war, bid fair to raise once more the Prussian army, if not to its former numbers and fame, yet to a degree of strength and respectability, which ere long will enable its sovereign to act in conjunction with others in

the emancipation of Europe. His return to the capital, after an absence of two years, will likewise accelerate the reorganization of the Prussian monarchy, instil vigour in every department, and give additional energy to the loyalty of his patriotic subjects. Prussia may be compared to a convalescent, who, after a severe illness, feels his vital parts uninjured; and who, therefore, by proper regimen, may again regain his pristine vigour.

Russia!!—Ah! for the honour of regular government, would she did not exist! Ah! would she had *never* existed, for the good of the common cause, which never derived any advantage from the precarious and remote aid of that fickle and half-barbarian government. Her assistance only hastened the ruin of her friends. Austria and Prussia were abandoned and sacrificed by her in the hour of trial: even ourselves had disappointment in return for the enormous subsidies granted to her; the inebriation of one of her commanders, and the consequent aberration from the plan of attack, lost us the victory in the battle of the 19th of September, 1799, in North Holland; and but for the skilful dispositions of the Duke of York, would probably have proved fatal to our troops. The advocates of Russia, perhaps, will urge necessity for her conduct after the battles of Austerlitz and Friedland; but what plea remains to them for her recent behaviour to Austria? What man of common sense and feeling that has not read with disgust and horror the march of the Russians last summer against Austria, her late friend and ally, particularly when contrasted with parallel events of an anterior period.

1683.	1809.
A horde of *Eastern* barbarians,* having penetrated into the heart of the Austrian dominions, a magnanimous Sarmatian sovereign† hastened with his forces to deliver the Austrian monarch *from* the grasp of the barbarians.	A horde of *Western* barbarians,* having penetrated into the heart of the Austrian dominions, a *magnanimous* Sarmatian sovereign† hastened with his forces to deliver the Austrian monarch *to* the grasp of the barbarians.
* The Turks. † Sobiesky.	* *La Grande Nation.* † Alexander the *Great.*

How dissimilar both *cases!* the one an *ablative*, the other a *dative*; perhaps our magnanimous cotemporary has forgotten his declensions. Patience! he will learn to *decline* soon enough.

But seriously, leaving honour and morality out of the question, how truly impolitic, how ultimately destructive to herself, is the present system of the court of St. Petersburgh! It is in every respect the

same as that of Prussia, before misfortunes had, too late, opened her eyes. The latter power, like her, deserted its friends, leagued itself with France, furthered all her plans of lawless ambition, and seized upon the provinces* of its allies, when scarcely the ink of the treaty was dry; till all of a sudden, discovering that it was but the duped instrument of French cunning, it attempted to assert that dignity and independence which it had long before forfeited and sacrificed, and precipitately plunged into ruin. So will it be said of Russia, should a change of policy not save her in time from the fate of her western neighbour. Already the seed of contention between her and Napoleon is germinating on the banks of the Danube; already is her sentence fixed, but delayed till a time more convenient for execution, when exhausted by the contest with Turkey, she will fall an easier prey. Then, no doubt, will her empty coffers be open to British gold; but it will be for England to judge how far a combination of other co-operating events may render her exertions worth purchasing, either with our money or the restitution of her fleet, and perhaps that of Denmark, or with both. But at all times her remoteness from the probable scene of action, and above all, the unsteadiness of her friendship, will demand caution in our dependance on her assistance.

The same vacillation, yet less want of principle, we have, for some years past, had occasion to observe in the councils of the Porte. Nevertheless, were that power extricated from her war with Russia, her hatred of the French, in consequence of the unprovoked and piratical invasion of Egypt and Syria, her contiguity to some of the French conquests might render the co-operation of an Ottoman force, in an extensive plan of opposition to Buonaparte's system of aggrandisement, highly desirable and advantageous. A Turkish army might act with success against Dalmatia, or the new Illyrian provinces; might even, after the expulsion of the French from Dalmatia, be conveyed across the Atlantic, co-operate in the kingdom of Naples with a British force landing in the west from Sicily, and (as nothing seems impossible in these times of wonder) a Mussulman force might reinstate Pius VII. in the possession of the patrimony of St. Peter.

Of the remaining European powers which still retain the name of an independant existence, their insignificance exempts me from the task of calling them into muster for the good cause. Sweden, deprived of the only continental sovereign who had magnanimity enough to bid defiance to the threats of the Jacobin emperor, much less to acknow-

* Hanover, &c.

ledge him, is, by the disastrous war with Russia and her native poverty, put *hors de combat*. Denmark, irritated by the loss of her fleet, will not easily be induced to make common cause with us, should we even deem the restitution of her navy an adequate price for the service of her limited military power.

In the preceding pages I have endeavoured to impress on my readers a conviction of the nullity of our enemy's threats, of the security of our own situation, and the precarious greatness of the empire of Napoleon, and the risk he runs in the continuance of his ambitious designs. I have cursorily surveyed the condition and abilities of the principal continental governments, in order, if possible, to judge whether necessity will henceforth dictate to them submission to the will of France, or whether they still possess power and disposition to struggle, if not singly, yet conjointly, against the fate prepared for them.

But it is not all to be assured of passive safety, it is not enough to have cheering prospects from the efforts of others. A more important, a most awful task is left to ourselves. What is England to *do* in a situation far more momentous than any recorded in the pages of our history?—Conclude peace with Napoleon at all hazards, abandon Spain, Portugal, and Sicily, surrender to him Malta, the Cape, and our conquests in the East and West Indies, permit, or even assist his brother to take possession of the Spanish colonies, dismantle our ships, discharge our soldiers and sailors, and then enjoy free trade to all parts of the world—if permitted by Buonaparte? Such a peace, or one very little better, might we expect from him; and yet such, lamentable to tell! is the language of some, I trust not many, of our politicians, untaught by the disastrous experiment of the peace of Amiens: as if we had lost more colonies than we actually have gained, as if our navy were humbled, our population exhausted, our commerce destroyed, our finances ruined, our coasts threatened with invasion. If then I have succeeded in shewing the contrary of all this to be the case, where is the necessity, where the advantage of a peace, which would in no degree better our situation; and which, supposing it did for a while, we must be convinced, from the character of Buonaparte, would continue no longer than suited his convenience; which would enable him to proceed uncontrouled in the subjugation of the rest of Europe. England once lulled into peace, the sheet-anchor of Europe is gone, and the remaining spirit of its nations will become paralyzed, or sink into despondency. It is to this country that the oppressed governments and subjects of the continent have hitherto looked up as to their last hope; it is to this country they have hitherto fled for help and

support; it is this country which has hitherto dispensed its aid to the efforts of their generous despair; it is this country which, by *that* assistance, has hitherto retarded the progress of the enemy of mankind; and it is this country alone which, as long as it stands firm, will ever thwart the completion of his ambitious designs; nay, which, if his downfal is permitted by the decrees of heaven, will be the instrument of his ruin.

Instead of peace then, let us openly and seriously bid defiance to our foe; let us do, in a good cause, that which the national convention did in the worst; let us publicly and solemnly proclaim to all Europe our readiness and determination to assist, with all the means in our power, every nation and government that shall attempt to shake off the chains already imposed on them, or resist the enemy in his attempts on their liberties. From such a declaration of our intentions alone, the most important results may fairly be expected. While it is likely to rouse latent energies in the breasts of the oppressed, it will, if not strike terror and dismay into that of the oppressor, at least cause him seriously to pause in the pursuit of his tyrannical career. But not content with the mere promise, let us be prepared to make good our word. The means we possess for that purpose are money and troops. And when I mention pecuniary aid, it is not from our government alone that such aid ought to proceed. Let us all contribute to the noble undertaking of assisting our unfortunate brethren, and by so doing, to the warding off our own danger, to the securing our personal existence. Let our opulent nobility, merchants, and capitalists, join in an extensive subscription professedly in aid of struggling liberty. How soon would the immense wealth of Great Britain produce a fund adequate to so generous, so glorious a design! How much more worthy of the character of Britons, than some of the subscriptions which of late have disgraced our annals! Thus every one of us will have it in his power, according to his means, to be instrumental in the emancipation of Europe, and consequently in the safety of our own country. It is not so with our military means, the extent and application of which, to so noble a purpose, must necessarily be left to the wisdom of our legislature and executive government. And here, it must be owned, our present strength will fall short of our wishes; although it cannot be denied, on the other hand, that the population of our empire is capable of much greater military exertion in a crisis, the importance of which so urgently calls for the utmost efforts of every description. It is not necessary in this place to inquire into the difficulties of recruiting our army, or to enter into the merits of the manifold schemes de-

vised for that purpose almost annually by our war ministers. A vigorous, effective, and permanent system calculated to double, or even treble the numbers of our troops of the line, is imperiously called for, if we wish to keep pace with the efforts of other nations, with the altered military system of the present day. And here, however obnoxious the *name*, I boldly advance, that something similar to a conscription, for limited service, adapted to the spirit of our constitution, would best answer the object in view. Let it not be said that such a system would be incompatible with our liberties. The most free states in ancient or modern times have imposed on their citizens the most rigorous military servitude. And justly so: the greater the value of the object to be defended the greater ought to be the number of its defenders. With us, the object is independence and existence; and for that we surely had better fight on the continent, than by waiting till we have to defend it on our own shores, uselessly protract the contest. Let it not be said that such a measure would drain our population. On the contrary, as the merchant who, on embarking at once a great capital runs less risks, and obtains greater and speedier profits; so would an increased military establishment waste less British blood, and lead us more speedily to a permanent peace. Not that we can expect singly to cope successfully against the undivided force of France; but certainly in her contests with other powers, the co-operation of a great British army would at all times be productive of the most beneficial results; the more so by reason of our maritime position. Situated in the centre of a vast semicircle of hostile coast, the enemy's ignorance alone of the point of our attack must create a distressing uncertainty what posts to defend, and of course oblige him to devote to the safety of his coast perhaps double our own numbers.—What might not have been the result of a British army of 60,000 men or more appearing on the coast of Biscay last summer, or on the banks of the Elbe or Weser, in the months of May, June, or even July? Such a force then disembarked in the mouth of the Seine, would in less than a fortnight have planted the British standard on the turrets of the Thuilleries without endangering an eventual retreat.

But such an augmentation of our military strength, it is to be feared, will long remain a pious wish. The risk at least of popularity in proposing such a measure, the obstacles of carrying it into effect, hold out but slender hopes. It may, therefore, be desirable to confine ourselves to the consideration of the best manner of applying our *actual* disposable force to the detriment of our enemy. Two extremes, under different situations, appear in this case to promise the greatest suc-

cess; a mean way in either seems objectionable. Should ever again France be at war with England *only*, an event no longer very probable, in such case, besides what purely maritime war it may be possible to wage against her, so as to exclude the insignificant remnant of her navy and commerce entirely from the sea, it may be advisable to annoy her coasts by small expeditions, consisting of, as the object may require, from two to five or six thousand troops. A force of that description may be landed on various vulnerable points, and after exacting contributions of every kind, and destroying all but private property, re-embarked before the enemy could collect troops sufficient for our expulsion. With four or five armaments of this nature, acting at the same time, infinite mischief may be done to the adversary; he would be kept in constant alarm and agitation; and such a warfare most probably would prove highly profitable to our warriors, whose achievements have ever been more conspicuous in bold *coups de main* than in a lengthened and regular campaign. This system, however, would immediately be to be abandoned for a more serious and effectual mode of warfare, as soon as the principal part of the French army was engaged, or certain to be engaged, in a contest with one or more of the continental powers. In such an event our allies must be assisted to the utmost of our power; and here the extent, as well as the time of our aid, is of the first importance. To dispatch then to two or three points, military corps of from 10 to 20,000 men, for the mere sake of diversion, or even to take or destroy a few ships, with which our ports are already glutted, would be frittering away our strength to no good purpose; repeated experience has vouched this assertion. Napoleon cares not for our diversions, he will not suffer himself to be diverted from the primary object of his plan for the time being; but he would be forced to attend to efforts of magnitude on our side. For such a purpose, therefore, the whole of our disposable force ought to be collected into ONE complete and well appointed army; and sent, if, for want of tonnage, not at once, yet in rapidly succeeding divisions, to ONE point of operation. The choice of that point must of course depend on circumstances; the choice of the commander on the wisdom of our government, unbiassed by any other consideration. Another most important duty of the executive is, the equipment of such an armament. *Few* of our numerous expeditions have yet left England completely equipped. One laboured under a want of boats; another had no shoes, or an insufficiency of camp-equipage; some have suffered from a want of medical men and medicines; most of them have had to deplore numerical or radical deficits in the commissariat; all, a

want of waggons, draft-horses, or other means of conveyance. Far be it from me to tax any particular administration with culpability on that score. I am too sensible of the difficulty of completing arrangements of so complicated a nature, of such immense detail, which often are planned and ordered admirably, yet executed imperfectly. It is not on the mainspring alone that the performance of the machine depends, there is wheel within wheel, a flaw in the most subordinate of which produces the most serious irregularities. We have in many respects already gained by experience, let us endeavour still more to improve from its dictates. The appointment of a store-keeper-general promises a more perfect system in the supply of stores to our troops serving abroad; a probable change in the medical superintendence of our armies, affords a prospect of amelioration; and from a recent change in the commissariat, by which all its branches abroad and at home are brought under one supreme authority, we have every reason to expect that a uniform and permanent system will forthwith be introduced in that most important department of our military establishment.

Next to the extent and internal perfection of a great British army to be employed on the continent, the time of its co-operation is of the greater moment, by reason of the characteristic rapidity of the movements of the enemy, whose campaigns, nay, wars, are generally terminated in a few months. To this circumstance it is principally owing that the greatest number of our expeditions have reached their destination too late, and been compelled to return without attaining any object adequate to their expence, or commensurate with the expectations of the nation. As we cannot remove the cause on the part of the enemy, as we cannot detract from his extraordinary celerity and his constant state of preparation, let us then be even with him; let us at all times be prepared in tonnage, stores, and troops, to send out a first division, at least of 18 or 20,000 men at a fortnight's notice; and let our arrangements be such, as to enable us to dispatch the remainder of our force as expeditiously after them as possible. In the present state of ferment on the continent, such a state of preparation is not likely to be long useless; next spring perhaps we might already experience its advantage. The very readiness of our own force would stimulate and accelerate continental efforts. Our ancient allies, impressed with a conviction of our ability to take the field at the same time with them, would certainly feel less hesitation and greater confidence to enter into a fresh contest with France.

What has been said thus far, regards the line of conduct to be

adopted on our part in the prosecution of the war, chiefly with reference to foreign co-operation. Something remains to be said of our own domestic duties, although the good sense and the loyalty of Britons supersede the necessity of enlarging on a topic otherwise so highly important. If we wish the energies of government to be displayed at a period when nothing but consummate wisdom and vigour can promise a happy issue of the present contest, let us not listen to the ambitious insinuations of designing demagogues, who, on the wreck of our loyalty, would rear their own power; let us spurn with the contempt they merit the periodical blasts of a few envenomed pamphleteers, who for a spot or two espied by an eye quickened in mischief, would have us throw away the mantle which warms and protects us, in order to leave us the alternative of sans-culottism and anarchy. Deaf to their sedicious cant, let us rally round a sovereign whose only aim, during a reign of half a century, has been the happiness of his subjects; by the wisdom of whose councils Britain has braved every threatening danger, and arrived at a degree of prosperity and wealth, at an eminence of power, unparalleled in the history of nations. Let us pause before we embarrass the ministers of his councils by frivolous attacks, the defence against which must absorb the time which they ought to devote to the awful concerns of the empire. Let us be sensible of the blessings of our glorious constitution, which the long reign of a paternal monarch has preserved untainted; a constitution which grants all the liberty a civilized state is capable of enjoying; a constitution which will permit none to guide the helm of our affairs but men whose talents enable them to account for their actions in our senate; a constitution which to the meanest birth opens a path to the highest honours, while it subjects the highest ranks to the burthens of the state, to the arm of our incomparable laws; a constitution, the pride of Britons, the envy of our neighbours.

Thus protected, thus prepared, let us combat till the arrogance of our enemy is humbled, or his career of oppression terminated by the fate which awaits all tyrants and usurpers. Conscious of the rigteousness of our cause, and the amplitude of our strength, we need not fear the issue of the contest. We shall leave to our children our empire, constitution, and national honour unimpaired. They will bless the memory of their fathers, and the fortitude and valour of Britons will remain a theme of admiration to future generations.

PHILALETHES.

MISCELLANEOUS EXTRACTS FROM FOREIGN JOURNALS, RELATIVE TO TRADE, COMMERCE, &c.

Demand for Cotton on the Continent.

THE demand for Macedonia and Levant cotton has greatly increased on the continent of late, and several Greek merchants have received passes from the Austrian government to go through Hungary to Wildon and other Turkish towns, to make purchases, and to forward it to the capital, where considerable orders have been received from France, Switzerland, and Germany."—*Moniteur Universelle, Jan.* 1810.

This circuitous route of obtaining the raw material for the supply of the manufacturers of the continent demonstrates clearly that part of the French Exposé (*vide page* 216.) *which acknowledges the suffering of French commerce from the present situation of affairs; and whilst the consumer of manufactures has to pay the advanced price necessarily incurred from the difficulty of procuring thereof, and scarcity of the raw materials, the like articles of the manufacture of this country must and will find a ready market in their place.*

"Many commercial houses at Vienna have lately speculated very considerably in the purchase of colonial goods from the *Maltese** and *Americans*, through the port of Fiume, from whence they have been conveyed through Hungary, and from thence to Vienna; notwithstanding the hazard attending this circuitous route, it has answered the ends of the different speculators."—*Journal de Commerce.*

"From Venice and Ancona the letters announce, that in consequence of the Adriatic Gulph being free from English cruizers, the whole of the Italian ports were open, and much business had been done in the purchase of goods from the Levant and other parts. From Petersburgh we learn that the Commercial Academy at Tangarock was opened with great ceremony in the month of September last."—*Journal de Paris.*

The House of God turned into a trading Mart.

By a decree of the new king of Spain, issued 14th Nov. for the benefit of the commerce of Madrid, the church of Good Success, with all the buildings belonging thereto, has been condemned, that an extensive exchange may occupy the scite of it. The church will be immediately

* Vide Commercial History of Malta in our last Number, page 137.

pulled down, and the buildings erected according to a plan approved by the minister of the interior."—*Journal de l'Empire.*

Singular Phenomenon in Tallow, from the Report of M. Vauquelin of Paris.

He has lately made a report on the manufacture of tallow for candles, in the name of the committee of chymical arts. These candles, says he, are professed to be purified from all animal substances of an injurious nature, and to be free from all moisture, and not the least discoloured. On examination I found the tallow to be demi-transparent, perfectly dry and sonorous; it is indeed so very dry, that when a blade of iron is passed over it, only lightly touching it, it shows a phosphoric light, extremely lively, occasioned, according to all appearance, by an electric motion; for when this tallow is recently melted, and the surrounding air extremely dry, the mere passing of the hand on it is sufficient to produce sparks and cracklings. The dryness of this tallow is still further demonstrated by its perfect transparency when melted; at the temperature of boiling water neither bubbles nor clouds are discernible. This tallow, it is affirmed, may be kept in the same pure state for two years. The candles made thereof are very white, their light extremely pure, they have little or no smoke, and they do not gutter or run, nor require snuffing so frequently as common ones; added to which, the enhancement of price is a mere trifle.

Curious Experiment on Tobacco.

A chymist at Paris has lately made several curious experiments on tobacco, which, if found to be correct, will occasion a great innovation in the trade and manufacture of that vegetable: his results were, that the acrid principle of tobacco differs from that of all other vegetables whose properties are known; that it can, by an easy process, be separated from the plant either green or dried, and in a liquid state; and that the juice then extracted may be combined with the dried leaves of any tree, and thus form tobacco. The remains of the plant, after the acrid principle is thus separated, have neither smell nor taste.

Extract from Archangel.

"The winter has set in here with the greatest severity, and the mouth of the Dwina is completely frozen up. The wind continued in the north-west, and has blockaded the mouths of the rivers and the Par with the ice driven up, so that no vessels ha[ve] been able to get out; a very large fleet, having valuable cargoes [of] tow, hemp, flax, bristles, iron, potash, mats, linen, &c. have bee[n] obliged to lay up [for the] winter."—*Journal de Commerce.*

"Several mercantile houses connected with the bank of Vienna have sent circular letters to their correspondents in Bavaria and Suabia, recommending them to buy up the paper of the Vienna bank, assuring them, at the same time, that the Austrian government were taking measures to cause a rise in the exchange; however, no person was willing to try the experiment.—*Journal de l'Empire.*

MONTHLY COMMERCIAL REPORT.

Paris.—THE following project of a law has been submitted to the legislative body, and which was appointed for discussion on the 12th of last month:—

"Article I. Red lead shall pay, on importation, a duty of six francs per decimal quintal.

"II. All merchandize except linens, muslins, cotton stuffs, woven goods (the importation of which into France, wherever manufactured, is prohibited by the laws), may be introduced into consumption whenever they proceed from prizes made by ships of the imperial marine, or by privateers subject to the hereafter expressed regulations.

"III. Manufactured tobacco shall pay the importation duty of tobacco in the leaf, and also the duty on the manufactured article; other articles of merchandize shall pay a duty of 40 per cent. *ad valorem*, and those that are not prohibited are to remain subject to the existing duties only.

"IV. The merchandize authorized to be introduced by the second article, cannot be imported except at the ports of Bayonne, Bordeaux, Rochelle, Rochfort, Nantes, L'Orient, Brest, Morlaix, Quimper, St. Maloes, Cherbourg, Caen, Havre, Dieppe, Boulogne, Calais, Dunkirk, Ostend, Antwerp, Genoa, Nice, Toulon, Marseilles, Cette, Agde, Port Vendée, and Leghorn.

"Whenever prize ships are brought into other ports the merchandize shall be conveyed to the nearest of any of the above ports, the captors giving security to pay the duties, and also to pay the expence of conveyance.

"V. In the importation offices there shall be affixed to both ends of each piece of cotton stuff of woven goods a piece of lead, on the one side of which shall be struck, Imperial Customs; and on the other, Prize Goods.

"VI. The exportation of fire-wood from Parma and Piacenza to the kingdom of Italy is free, subject to a payment of five per cent. *ad valorem.*

"VII. The above article must be conveyed along the Po; by any other way it is prohibited, under pain of confiscation.

"VIII. In the case of false declarations, with respect to the right or quality of French manufactured cottons for exportation, the penalty shall be double the amount of the bounty on exportation.

"IX. The export of unwrought cotton is prohibited.

"X. In the city of Savona there shall be a depot for colonial produce and foreign merchandize which are not prohibited. Such articles as are delivered for consumption shall regularly pay the duties."

Brazils.—By recent letters received, the Rio Plata and Buenos Ayres are declared open to the British by the Viceroy, on the following conditions: the cargoes to come consigned to a Spaniard; who is to enter the same, and is to receive 10 per cent. commission on sales. The duty is fixed at 24 per cent. on the value of the market price of the article on the day of the entry, so that the duty may be calculated at 50 per cent. on the cost. The British in that country who are concerned in the Buenos Ayres trade are not at all pleased at the trade being thus thrown open. Goods were in abundance there, and selling, according to some accounts, at a loss; and it was expected that the goods of this country would become a mere dreg.

This measure is so far beneficial to the British resident there, as it will induce the Spaniards to go thither and purchase, and introduce their purchasers at Buenos Ayres by running them. All the produce of the country is exceedingly high, and tallow at 20 reals the arobe of 25 lbs.

Holland—The commercial regulations are now to be promulgated from the actual seat, the ruling power in France, and the following decree was issued from the Thuilleries on 30th January last:—"That all the English merchandize that exists in the towns and places situated between the Maese and the Scheldt is confiscated, and that the product thereof is detained to repair the havoc and pillage of Flushing, and all colonial merchandize is put in a state of sequestration."

And the following decree was issued by the nominal king of Holland on the 1st of February:—

"The director of the customs is informed that it is the positive intention of his majesty that provisionally no American vessels shall be suffered to enter any of the ports of this kingdom, whatsoever their cargo may consist of, or from whatsoever port they may have sailed, whether they have been in England or have been overhauled on their voyage by the English or not, but that those ships shall go again to sea as soon aspossible, without having discharged any part of their cargo.

Russia.—Considerable mercantile embarrassment has for some time past prevailed at St. Petersburg, and very little business has been doing, specie being excessively scarce, and credit daily diminishing: on the 4th Jan. the Hamburgh exchange was at 12, and the ducat was equal to 10 rubles in bank paper.

America.—The following bill has been brought into the house of representatives respecting the commercial intercourse between the United States and Great Britain and France.

The first section prohibits all public vessels belonging to Great Britain from entering the harbours of the United States, subject to certain specified exceptions.

The second section prescribes the punishment of those who shall aid the infraction of this provision.

The third prohibits all vessels sailing under the flag of Great Britain or France, or owned in the whole or in part by any citizen of either, from entering the harbours of the United States.

Fourth prohibits the importation in the West Indies of goods from Great Britain or Ireland and France, and their colonies, or of goods from any foreign port, which are the growth, produce, or manufacture of Great Britain and France, unless in vessels owned wholely by citizens of the United States.—The above to take immediate effect.

Fifth prohibiting, after the 15th April, the importation of goods from Great Britain and France, and their colonies, unless imported directly therefrom.

Sixth, seventh, and eighth affix penalties to the infraction of these provisions.

Ninth authorizes the president, in case either France or Great Britain shall so revoke or modify their edicts as they shall cease to violate the neutral commerce of the United States, to declare the same by proclamation, after which the prohibition of this act on the commerce of the nations so doing shall cease.

Eleventh repeals the act to amend and continue in force certain part of the act entitled, "An act to interdict the commercial intercourse between the United States and Great Britain and France, and their dependencies, and for no other purpose."

Domestic.

Considerable arrivals of wheat and other corn have entered our ports from the continent; and the price of corn has received a check, during the last month, of about 8*s.* per quarter. Sugars have experienced a considerable rise, owing chiefly to the bill recently brought into parlia-

ment for prolonging the restriction of distilling from grain, and they may be called from five to six shillings per cwt. dearer than at the same period last month; but this price will not be kept in the market. Coals, notwithstanding the frost towards the end of the month, have had a depression of from 6*s.* to 8*s.* per chaldron. The numerous arrivals of cotton wool, particularly at the port of Liverpool (vide list of importations at that port) has caused a reduction in the price of that article from 3*d.* to 4*d.* per lb. And from the valuable cargoes of hemp and flax recently arrived from the Baltic, those articles are also considerably lower; but indigo, particularly Spanish, we have to notice, is something dearer. Soap and candles have also experienced a small reduction. Most of the linens brought from Ireland last year on speculation still remain a dead stock in the London warehouses, and may be purchased now at a reduced price. The linen trade was materially injured by this speculation: the price of brown linens advanced so rapidly that the purchasers of white goods declined to buy on high terms. The Irish growers entertain hopes that they shall have a more adequate supply of linseed for next season, from the great quantities of Riga seed lately imported by the London merchants, and from an expectation that much of the American article may find its way through neutral ports, as well as on account of many farmers having sowed a considerable quantity of seed. Licenses are still granted to tranship cargoes of British manufactures, colonial produce and East India goods (originally shipped from this country) from Sweden to the Baltic, and as this traffic is sanctioned in the treaty of peace between Sweden and France, it keeps an excellent door open for ever to the British merchant and trader.

AGRICULTURAL REPORT FOR FEB. 1810.

THE wheat throughout the kingdom looks well in the field, and in consequence of which it is a sinking article at market, as are also every other species of grain. Those parts that have experienced snow have been well protected from the late frosts; but the turnips which have received no snow have suffered considerably. The compost in general has been carried on the meadows and mowing grounds.

Wool is on the advance, and sheep may be called generally rotten; insomuch so, that from our Warwickshire correspondent, we learn that 3000 carcasses were taken into Birmingham in one day, the sale of which was cried down by the high bailiff. Pigs were never known so dear as at present. Stock both fat and lean are on the advance, particularly the former.

GAZETTE NOTICES RESPECTING THE LONDON DOCKS, AND ICELAND.

THE LONDON DOCKS.

10th Feb. 1810.

WHEREAS, by an act, passed in the 43d year of his present Majesty's reign, intituled, "An Act for permitting certain Goods imported into Great Britain to be secured in Warehouses without Payment of Duty," it is enacted, that it should be lawful for the importer or importers, proprietor or proprietors, consignee or consignees, of any of the goods, wares, or merchandize enumerated or described in the Table thereunto annexed, marked B, which shall be legally imported and brought into the port of London, to lodge and secure the same under the joint locks of the Crown and the London Dock Company, in any warehouse or warehouses, erected or to be erected, situate within the premises belonging to the London Dock Company, without payment, at the time of the first entry of such goods, of the duties of customs or excise due on the importation thereof, subject, nevertheless, to the rules, regulations, and restrictions therein contained, provided that no such goods, wares, or merchandize should be lodged or received, unless and until such warehouses or other works, belonging or to belong thereto, should be so far completed, that, in the judgment of the Lord High Treasurer, or the Commissioners of his Majesty's Treasury for the time being, or any three or more of them, the same shall be fit and proper, in every respect, for the reception of such goods, and wherein the same might respectively be safely and securely deposited, and remain under the regulations and directions in the said act contained: and the said Lord High Treasurer, or Commissioners of his Majesty's Treasury for the time being, or any three or more of them, were thereby authorized and empowered in writing, under his or their hand, or hands, to certify and make known his or their approbation of warehouses, which certificate should be published, three times at least, in the London Gazette, and in two or more public Morning Papers: and whereas, the Table marked B, above referred to, is in the words following:—

TABLE B.

A list of articles which (not being imported by the United East India Company, or not imported from the West Indies) may be secured in the warehouses within the premises belonging to the London Dock Company, without the duties due on the importation thereof being first paid:

Rice — Brandy
Tobacco — Wine
Geneva, or other spirits.

And whereas certain vaults for wine and spirits, and warehouses for other articles of merchandize, and other parts of the said works have been approved by the Lords of the Treasury, and are now in use: and whereas the building hereinafter mentioned, part of the said works, has since been completed

We, being three Lords Commissioners of his Majesty's Treasury, do certify, that, in our judgment, that part of the building erected on the north-west angle of the Dock-premises, marked A, is now so far completed as to be fit and ready, in every respect, for the reception of wine, brandy, geneva, and other spirits.

(Dated) 31*st Jan.* 1810. (Signed) S. PERCEVAL.
W. BRODERICK.
DYSART.

ICELAND.

[Vide page 68, No. 19, for JANUARY last.]

10th Feb.

WHEREAS it has been humbly represented to his Majesty, that the islands of Feroe and Iceland, and also certain settlements on the coast of Greenland, parts of the dominions of Denmark, have, since the commencement of the war between Great Britain and Denmark, been deprived of all intercourse with Denmark, and that the inhabitants of these islands and settlements, are, in consequence of the want of the accustomed supplies, reduced to extreme misery, being without any of the necessaries, and of most of the conveniencies of life, his Majesty being moved by compassion for the sufferings of those defenceless people, has, by and with the advice of his Privy Council, thought fit to declare his will and pleasure, and it is hereby declared and ordered, that the said islands of Feroe and Iceland, and the settlements on the coast of Greenland, and the inhabitants thereof, and the property therein, shall be exempted from the attack and hostility of his Majesty's forces and subjects; and that the ships, belonging to inhabitants of such islands and settlements, and all goods being of the growth, produce, or manufacture of the said islands and settlements, on board the ships belonging to such inhabitants engaged in a direct trade between such islands and settlements respectively, and the ports of London or Leith, shall not be liable to seisure and confiscation as prize: his Majesty is further pleased to order, that the people of all the said islands be considered, when resident in his Majesty's dominions, as stranger-friends, under the safe-guard of his Majesty's royal peace, and entitled to the protection of the laws of the realm, and in no case treated as alien-enemies: also, that the ships of the United Kingdom, navigated according to law, be permitted to repair to the said islands, and trade with the inhabitants thereof; and that all his Majesty's cruizers, and all other his subjects, be inhibited from committing any acts of depredation or violence against the persons, ships, and goods of any of the inhabitants of the said island and settlements.

(Signed) FAWKENER.

PROVINCIAL OCCURRENCES AND MISCELLANEOUS INFORMATION

Liverpool, Arrivals at the Port of.—The total number of vessels, which have arrived at the port of Liverpool, from different parts of the world, during the year 1808, is 2105, and in 1809, 3055. There was consequently an increase in the last year of 950 vessels. It is to be observed, that coasters are not reckoned in this account. The average of arrivals for seven years, ending 1808, was 2220 vessels for each year.

Number of Fires in London during the last Year.—It has been accurately ascertained that the number of fires which have happened within the limits of the metropolis, for the last year, has been as follows, not reckoning therein the number of chimnies which have taken fire during the same period.

During the quarter, ending March last,	73
June,	77
September,	58
December,	85
Total	293

Singular Cure of the Gout in Essex.—Mr. Pelly of Upton, Essex, a gentleman advanced in years, and who used to be laid up for three or four months

in the year with the gout, having read in some old book, that a load-stone, worn next the skin, was a sure preservative against that painful disease; and knowing that some of the finest and most powerful magnets are found in Golconda, employed an agent in India to procure him one from that province. This stone, chipped into a convenient shape, he constantly wears, sewed in a little flannel case, suspended from a black ribbon round his neck, next the skin. It is about two inches long, and an inch and a half broad, and two tenths of an inch thick; and its magnetic virtue is very great. It much resembles a piece of slate. Since Mr. P. has worn this amulet, he has had some slight twinges, which serve to remind him of the terrible paroxysms to which he was once subject. He happened one day accidentally to omit hanging it about his neck; a second and a third day passed; and as several years had elapsed without a fit, he began to think the magnet had altered his very system, and rendered him intangible to the gout. In this he was however soon undeceived; he awoke one night in torment, called for his safeguard, and threw it about his neck. He escaped with a slight attack, and has never since been without his piece of loadstone, which he wears day and night, and enjoys perfect freedom from all the pains inflicted by his old enemy.

Association of Watch Manufacturers at Coventry.—Depredations of housebreakers have been so frequent of late in the country towns, particularly about Coventry, that an association of the watch manufactures have entered into a subscription towards the expence of prosecuting and convicting any depredations on any member of the society, and for handsomely rewarding any person, in detecting to conviction. If this plan was more generally adopted in our principal manufacturing towns, and the solicitors of such associations were to correspond with the public offices of Bow Street, conviction would be much more frequent, and consequently assist to the extinction of such daring depredations as have of late taken place.

Liverpool, dreadful Accident at.—On Sunday forenoon, 11th Feb. a few minutes before the commencement of divine service, while the bells of the parish church of St. Nicholas were ringing the second peal, a portion of the congregation being assembled in the church, and more collected in the yard, and just as the officiating clergyman was about to enter the building, the key-stone of the tower gave way, when the north-east corner, together with the adjoining walls, and the whole of the spire which was erected on the tower, instantly burst through the roof, and fell along the centre aisle. The ruins extended nearly to the communion rails, bearing down and demolishing the western gallery, the organ, the reading desk, and such seats in the body of the church as they encountered in their progress. The first impulses of astonishment and dismay, occasioned by the sudden and tremendous shock, were succeeded by a scene of confusion, grief, and anguish, which language is unable to describe; in the midst of which the activity and humanity of the mayor and magistrates, the gentlemen of the faculty who gave their assistance, and the subordinate officers of the police, are deserving of the highest applause.

A falling stone, which struck the fifth bell, warned the ringers of their danger, and they were enabled to escape unhurt—but twenty-two bodies were dragged mangled and lifeless from the ruins, many who survived were severely bruised, one since dead.

But it would be too painful a task minutely to detail the incidents of this melancholy day. Suffice it to say, that the remembrance of the sad spectacle it presented will long make the heart of humanity to sicken and to shudder; while numbers of those, who, if the disaster had happened a few minutes later, might have shared the fate of the victims that have perished, will dwell on their providential escape with mingled emotions of gratitude and terror. And even the passing spectator, while from vacant curiosity or compassionate sympathy, he pauses to contemplate the ruins, will not fail to be struck with the

seasonable and solemn admonition inscribed on the dial, which remains suspended on the wall:—

"*Ex hoc momento pendet eternitas.*"

The tower of St. Nicholas's church is the oldest erection in town, and in consequence of the fall of the spire is likely to be taken down; but the spire and upper part of the tower were modern. The old tower, on which these were erected, is supposed to have been built at least as early as 1360, 450 years ago. The new erection was projected in the year 1745, as appears from the following extract from the vestry-book:

11th September, 1745.

"It is ordered by this vestry, that a spire shall be built on the tower of the parochial chapel of St. Nicholas, and that a plan thereof be, in the mean time, drawn by Mr. Thomas See, and proposals for building it be delivered in to the present church-wardens, Messrs. Hugh Ball, and Samuel Seel, who are to lay them before the next meeting of the vestry."

In the said vestry-book, it is stated, on 1st April 1746, that a contract be made with Messrs. Sephton and Smith, to complete a spire on the plan drawn by Mr. Thomas See, and voted 11th September, 1745. The spire was accordingly completed in the year 1750, by Messrs. Sephton and Smith, on the said plain, the payment of which is entered in the church disbursements 310l. in addition to which they were paid 22l. 1s. for chipping the old tower, amounting in the whole to 332l. 1s.

ACCOUNT OF NEW PATENTS.

New Method of raising Weights, by Mr. Simeon Thompson, of Maddox Street London.—This invention does not extend to very heavy weights, but is confined to those which are equal to, or rather less than the weight of the man or men employed in the operation. It is peculiarly adapted to raising coals out of a ship's-hold, or bricks to a high-building, or any other things of the same or similar kind. The plan may be thus described:—If the machinery is to be adapted to raising coals from a ship, a single pulley is fixed to the mast, over which a strong rope is passed; to one end is fixed a basket, into which the coals are thrown, and to the other a stage of any kind, to hold one, two, or more men. Suppose the basket filled, the stage will be aloft; and the man or men mount a ladder, from which they step into the stage, and by their weight instantly raise the basket. The momentum of the man or men in the stage, gives motion to the basket, which is of course raised with an accelerated velocity; but the method of stopping the machine is very simple and easy. To raise any thing to the top of a building, two strong scaffolding poles are fixed, and the pulley suspended between them; the ladder rests against the cross-beam that supports the pulley, and then the operation is as before. But if the building is very high, then the mechanical power of the wheel and axis is used, in order that the man or men may only have to walk up a ladder to half, or one-third, &c. of the height to which the bricks, mortar, stone, &c. are to be raised. Water may be raised by the same kind of machinery. The operation may be seen almost any day at the vacant space at the end of Wild Street, Lincoln's Inn Fields.

The patentee says: the basket is raised by one man, or by two, alternately, and any given quantity of work can be done by two men, much easier than by four in the usual method. Two baskets, in the case of coals, may be worked out of the hold by two machines and two gangs. The machine is simple, and

may be fixed at a small expence in a few minutes. By the present practice, whether the hold is ten or twenty feet deep, whether the ship is worked at the rate of forty, or one hundred and forty chaldrons per diem, the same number of men are employed, which, of course, is a waste of labour, to employ four men to perform what might as readily be done by two, or even one person. Mr. Thompson claims to be remunerated by his employers in the proportion of one-third only of their actual savings: a fairer or more honourable mode cannot be devised, and it should seem surprising that it has not been used in many instances to which it is evidently well adapted.

Method of stowing Cargoes of Ships, &c. by Means of Packages for containing Goods, &c. by Mr. Richard Trevethick, and Mr. Robert Dickinson, of Rotherhithe and London.—Instead of the casks, trunks, &c. now used for packing, and securing from damage, articles of merchandise, whether in the solid or liquid form, the patentees make use of cast or wrought iron receptacles, made so close and tight as to be absolutely impenetrable to the external air and moisture. They are so constructed, as to figure and shape, as to fit exteriorly to each other without the waste of room, which often takes place in the stowage of wooden casks. The forms adopted in this specification, and which are considered as preferable to others, are the rectangular or hexagonal prism. In other cases, where economy of space is not very requisite, they employ cylindrical vessels and chests, and they contend that whichever mode be adopted, still there will be a saving of room; and that, by their invention, a much larger quantity of goods can be stowed in an equal space, than when they are put into packages made of wood, the sides and ends of which are necessarily of considerable thickness. Another advantage resulting from this invention is, that water, oil, and various other fluids, as well as provisions of different kinds, will be better preserved from waste, putrescency, leakage, depredations from insects, and other living creatures, in iron vessels than in vessels made of wood. In some cases the iron packages are recommended to be tinned or varnished.

Method of preparing Soda, and other mineral Waters; spirituous, acetous, saccharine, and aromatic Liquors, &c. by Mr. Francis Hamilton, Mount Street, Dublin.—By this invention, various solutions of alkalies, salts, &c. and combinations of ardent spirits, vegetable acids, aromatic oils, sugar, milk, mucilage, &c. are used for saturarion with carbonic acid. The gas is obtained by the decomposition of whiting, with dilute sulphuric acid, applying the whiting in a liquid state, to admit of its introduction to the laboratory, in which the carbonic acid is disengaged with facility and cleanliness. The solution is exposed in a well-tinned copper-vessel, under a certain pressure for the absorption of fixed-air, which may be effected without interruption to the injection of solution from a condensing syringe, or discharge of aërated liquor, from a decanting stop-cock, so that the bottling may go on continually. The piston used is solid and cylindrical. It forces upwards, causing the proportionate supply of liquid matter which is injected by it at the same time with the carbonic acid, to serve as a lute to the collar of leather, already nearly air-tight. The valves are placed in the plugs of acting stop-cocks, so that if they get out of order they may be easily ground air-tight again, by withdrawing the plugs; in which case the charge may still be preserved in the vessel by means of another set of stop-cocks placed nearer to it. The shape of the vessels used is a long oval; they are placed on their sides, so that the liquid being always in contact with the stopper, no leakage can take place, and this shape permits the contents to be more easily poured out with less loss of fixed air. Sometimes the neck and mouth of the bottle are so formed, that it may serve as a drinking-glass, if necessary. Cork is generally used as a stopper, which, from the pressure generally existing within the bottle, flies out on the string being cut; but sometimes Mr. H. makes use of ground-glass and wooden-stoppers. He saturates under a pressure of 120 square inches, which is reduced, in part, on the liquors being bottled. The decantation is effected

by stopping the mouth of the bottle or jar with a perforated cork, leather, &c. through which the decanting tube passes, so that on opening the cock, the aerated liquor rushes into the bottle, till resisted by the condensation of the atmospheric air it originally contained, and a portion of carbonic acid gas is extricated during the effort. When full, the bottle may be withdrawn and stopped with ease, by letting off slowly a small portion of the fixed air contained before its removal. In some cases the decanting-cock is constructed so as to allow the stopper to pass into the bottle, &c. previously to its removal from the flat air-tight fitting; by which means the entire pressure may be retained.

Method of spinning Cotton, Flax, and Wool, by Mr. John Leigh Bradbury, Meath.—The figures annexed to this specification, shew the fly turning upon the spindle with its arms pointing upwards. The bottom of the spindle rests upon, and turns in a step fixed in a rail, and passes through a collar in the rail which supports the fly resting in the washer. The upper part of the spindle is smaller in diameter than the bobbin, so as to leave a shoulder for it to rest on. A pulley is fixed on the spindle, and another on the socket of the fly. The fly, turned by the pulley, from the drum, twists the thread as delivered from the rollers of the machine, and by means of the thread turns the bobbin. The draught, or winding up of the thread on the bobbin, arises from the friction of the inside of the bobbin, against the small part in the spindle, and from the bottom of the bobbin, against the shoulder of the spindle, or washer fixed on it. This draught is regulated by the spindle which is turned by another pulley from another drum, in the same direction as the fly, in a contrary direction, or remains stationary, as the quality of the thread requires.

The principle of this improvement, as distinct from the old mode, consists in inverting the fly, and giving it a separate motion from the spindle. The improvement arises chiefly from these circumstances; first, as the fly is the chief agent in twisting the thread, it is the only part kept in rapid motion; consequently there is a great saving of power, since, in the old machine, the spindle and fly turned together at the same speed: secondly, the bobbin, fly, and spindle, having their distinct and separate motions, the draught, or inclination of the thread to wind up, can be regulated to the utmost exactness, and, when regulated, will remain invariably the same at whatever speed the machine shall turn; whereas, in the old mode, a variation of speed produces a variation of draught, thereby breaking the thread, and causing much waste: thirdly, on account of the inverted position of the fly, the bobbin can be taken off and and put on with expedition, whilst in the old plan it was necessary to stop the spindle, and unscrew the fly from the top, or to take out the spindle. By these improvements, the patentee avers that the quantity of yarn produced in each spindle, is nearly double to that on the old plan, with the same power, and of any degree of fineness.

MONTHLY RETROSPECT.

FOREIGN AFFAIRS.

Spain.—The affairs of this distracted country are now rapidly approaching to a crisis. The accounts received from the Continent indicate the activity and spirit with which the enemy mean to prosecute the war in that country. Numerous reinforcements have already crossed the Pyrenees; and the troops which had entered, or were directing their march towards Spain, were estimated at more than 100,000 men. The corps of Junot, to which 16,000 cavalry are attached, form a part of this army. Berthier has been appointed to the staff; and it appears evident that Buonaparte intends to conduct the operations of this formidable force in person. The French armies in Spain

have, in the mean time, commenced offensive operations. One large division has entered the kingdom of Valentia, and the main army has actually forced the passes of the Sierra Morena, which might have been rendered impregnable, had they been properly guarded. The grand object appears to have been to pass on and seize the city of Cadiz, together with its shipping and arsenals, but which has happily been frustrated by the interception of some secret or traitorous correspondence.

The Duke D'Albuquerque, on notice of their intention, by the most rapid forced marches, reached the Isle of Leon, and formed a junction with the Duke Del Parque, forming together a force sufficiently strong and provided to defend the town, which is naturally strong and well defended; but from the number of the army, and the number of the refugees flown thither for safety, much was to be apprehended from a scarcity of provisions. The Spanish fleet, though not fully equipped, was ready for sea, and has been conveyed into the outer harbour. The Supreme Junta has been accused of deceiving the people by false appearances, and pompous proclamations; and the members of the Junta, assembled at Seville, have fled precipitately to Cadiz; the French appeared at the gates of Seville on the 29th and 30th of January; and Mr. Frere, the British envoy, was the last man, in an official character, who left the seat of government.

In this alarming situation, the inhabitants of the sea-port towns are shipping their goods either for England or South America, whither they intend to emigrate. Bills on London were in great request, and premiums to a considerable amount had been paid in dollars for such accomodations. A very considerable train of Artillery had, it is added, left Cadiz for Gibraltar.

Sweden.—The treaty of peace between Sweden and France was signed on the 6th January last, the conditions of which are as follows: Pomerania is restored to Sweden: France guarantees the present possession of the crown of Sweden; Sweden accedes to the continental system, yet with the exception of salt, which may be imported; the exportation of goods from Swedish harbours in Swedish bottoms is free; the contributions imposed in Swedish Pomerania, but not yet paid, are remitted; the grant made by the French Emperor in Swedish Pomerania is to be confirmed; Spain, Holland, Naples, and the Confederacy of the Rhine, are included in this treaty of peace; all Swedish ships taken or sequestrated since the accession of King Charles XIII. to the Swedish throne, shall be restored with their cargoes, (colonial produce excepted) the antient relations of commerce between the two kingdoms are to be restored, and the merchants shall be treated in both countries as the most favoured nations, and all prisoners of war returned.

Russia.—Considerable changes have taken place in the Russian ministry; but Romanzoff, the open and strenuous supporter of the French interest at St. Petersburgh has not experienced any abridgement of his authority.

America.—Between that country and France war now appears pretty certain. Several American vessels have been seized in the different ports of France, as well as in the different ports of *all his* tributary kings; and letters from Naples have exultingly made mention that the cargoes of the American vessels condemned there had fetched a very high price. The coffee sold for a silver ducat the pound; and that the proceeds of the whole were calculated at least five millions of ducats.

Holland is filling with French troops; and the district between the Maese and the Scheldt is already declared French territory, *to protect it from its enemies;* (vide *Commercial* Report) and the last letters received make mention that Amsterdam has received a garrison of *Dutch* soldiers, who, paid by Napoleon, secure his prey still more effectually than by the admission of a Gallic force, as the appearance of the latter might have raised the dormant spirit of the people. Respecting the annexation of part of the Dutch territory to France, a threat is thrown out to that unhappy country, that every portion of the Continent that shall suffer our troops to land shall immediately

be joined to France; and on this account he will no doubt find a happy pretext for declaring himself the Emperor of Holland, Spain, and Portugal. Indeed, General Oudinot is stated, by private letters, to be made governor-general of Holland; and that his brother Louis was under arrest at Paris, for being too importunate on the behalf of his poor distressed subjects.

The public funds had fallen from 100 to 70, and from 80 to 50 per cent. on account of the immense property withdrawn from the bank to be converted into money. But we are much surprised to observe, in the *Dutch Royal Courant*, of 13th Feb. an interesting article, vindicating the Dutch against the imputations of the *Moniteur*, which charges them with treachery, avarice, smuggling, &c. and calls upon Napoleon the Great to fulfil the promises and pledges, so solemnly given, at the period Holland was permitted to retain her independence among the nations of the Continent. Such an article, written in a land within the grasp of French influence and power, is a political novelty which, whilst it draws the gratitude of the country to its author, will attract the hatred and vengeance of the tyrant of the Continent.

Hanover.—The following extract from Hamburgh states, that the fate of Hanover and Oldenburgh is at last decided:—"We have received information, from the most unquestionable authority, that Buonaparte has declared his determination, though not officially, to incorporate the Duchy of Oldenburgh and the Electorate of Hanover with the kingdom of Westphalia." This is corroborated by the speech of the King of Westphalia, when he says, "The arts, trades, and great undertakings—in fine, every thing which contributes to the riches and glory of a nation, can only be cultivated with success on an *extended territory*, and with the aid of a *numerous population*.

A report from Botzen describes the patriot Hoffer to be at length taken, and that him, and his wife, and his secretary, was escorted through that town, by a detachment of French troops, on his road to Italy.

DOMESTIC.

The public are in anxious expectation of hearing of another naval victory, as it has been ascertained that Lord Collingwood's fleet was within gun-shot of the Toulon squadron when the last advices were received.

The different Gazettes, during the last month, contained a series of naval transactions fought in the West Indies, as splendid and gallant as any recorded in the annals of our navy. The squadron under Sir Alexander Cochrane, commanding the vessels on the Leeward Islands' station, consisting of the Pompee, Perlen, Alcmen, Sceptre, Alfred, and Freija and Caster, with the Cygnet, Hazard, and Ring-dove sloops, destroyed two frigates, although defended by two strong batteries on shore, which were also taken and blown up.

The Valiant, Captain Bligh, has captured, off Belleisle, the French frigate Canonnière, being one of the richest prizes ever taken; she was loaded with the plunder of several of our East India ships taken in the Indian Sea; she is valued at two millions and a half, and contained the following goods: sugar, 330,175 lb.; coffee, 281,912 lb.; mocha, do. 14,721 lb.; Bengal cotton, 197,384 lb.; indigo, 111,848 lb.; ebony, 19,550 lb.; tea, 300 boxes; pepper, 78,638 lb.; gum-arabic, 5142 lb.; tortoise-shell, 1091 lb.; cinnamon, 500 lb.; bark, 1293 lb.; galls, 4340 lb.; raw silk, 8691 lb.; elephant teeth, 1272 lb.; ginger, 10,708 lb.; and India goods, 800 pieces.

PARLIAMENTARY PROCEEDINGS.

Amongst the proceedings of the Imperial Parliament and public business, the most conspicuous has been the investigation of the late expedition to the Scheldt, the various papers of which, military and naval, are so voluminous, that prevents us making any extracts from them that could do justice to this important inquiry. Great debates took place on the Lord Chancellor's moving the thanks of the House to Lord Wellington, and the officers and men under

his command, at the battle of Talavera, which was strongly opposed by Lord Milton, who moved an amendment for omitting the name of Lord Wellington, which his lordship afterwards withdrew.

A bill, for rendering perpetual, an act of 48th Geo. III. suspending the power of the Crown to grant places in reversion, was moved for by Mr. Bankes, but on the second reading of the bill it was rejected in the Lords.

Leave was granted, on 1st Feb. to bring in a bill for amending an act of 48th of the King, which imposed a stamp-duty on all bills of exchange, and also included all drafts drawn on bankers, which were liable to a stamp-duty, except in cases where the bankers resided within ten miles of the place where the draft was drawn, this act being enforced by the penalty of 100l.; and, as an amendment to this act, it was proposed that forty miles should be inserted instead of ten.

Concerning the high price of bullion, Mr. Horner obtained leave for the production of the following papers, as illustrative thereof:—

The quantity of gold and silver imported or exported into and from this country during the last ten years.

The number of licences granted to pay promissary notes, payable to foreigners on demand.

The quantity of gold coin seized within the last ten years, intended for exportation.

The quantity of dollars struck and circulated.

The number and value of bank notes issued during the last two years; and

The quantity of bullion sent abroad since the commencement of the war, both to our allies, and to pay our own troops.

On the 6th Feb. a petition was presented by General Matthews from the Roman Catholics of Tipperary, which was ordered to lie on the table.

On the 13th, Mr Rose moved for a committe taking into consideration the expediency of continuing the corn-distillery prohibition act of the last Session, which was strongly objected to by Mr. Parnell, who contended that reports from every quarter of the country stated that no scarcity of corn now existed, and that the harvest was unusually plenty both in England, Scotland, and Ireland, in such a degree, that although in 1808 they only wanted a market for a surplus produce of 500,000 quarters, in 1809, they wanted a like market for 800,000, being a quantity greater than the average of foreign corn brought from the Baltic in the two last years. Mr. Rose explained, that it was not the intention to continue the prohibition to Ireland, when he allowed the harvest had been unusually abundant; and leave was granted accordingly.

On 19th Feb. a bill was brought in for enlarging and repairing the commercial docks.

Sir Samuel Romilly's three bills for the amendment of the criminal laws were postponed to the 12th of March.

And on the same day leave was given to Mr. Wellesley Pole to bring in a bill to amend the state of the prisons of Ireland. Great mischief, he stated, arose from the circumstance, that persons sentenced to transportation in Ireland, were to be brought to Dublin previous to their being sent abroad, by which the goal in Dublin, one of the worst in Ireland, became intolerably crowded: after a strong opposition against introducing the English system of poor laws into Ireland, leave was given.

On 20th Feb. a select committe was appointed to inquire into the state of the marine insurances of this country,* in consequence of an application to Parliament for granting a charter to a new marine insurance company.

---

* This report will afford many interesting particulars to the commercial world; and we shall take the earliest opportunity of laying the particulars thereof before our readers, as soon as the Report is ordered to be printed for the use of the House.

BANKRUPTS.

BANKRUPTCIES.

(The Solicitors' Names are between Parentheses.)

AMBLER John, jun. Islington, horse dealer. (Messrs. Jones and Roche, Covent garden Church-yard.

Appleton Wm. jun. and Edw. Smedley, Lancaster, rope manufacturers. (Hewitt and Kirk, Manchester; and Mr. R. Ellis Chancery lane.

Ashley John Gregory, Gloucester terrace, Commercial road, merchant, dealer and chapman. (Mr. Wilde, Castle street, Falcon square.

Atkinson William, Paradise street, Rotherhithe, broker. (Mr. Martin, London street, Fitzroy square, and Mr. Malme, Marsham street, Westminster.

Audley Wm. Bristol, linen draper. (Mr. Eayntern, Bristol; and Messrs. Vizard and Hutchinson, Lincoln's inn.

Babb John, of Leadenhall street, wholesale hosier. (Messrs. Collin and Waller, Spital square.

Bacon James, Hughe's fields, Deptford, victualler. (Mr. Whitton, Great James's street, Bedford row.

Barber Nath. Carsitor street, Chancery lane, stationer. (Mr. Bennett, Dean's court, Doctor's Commons.

Barns John, Truro, Cornwall, draper. (Mr. Wilde, Castle street, Falcon square.

Bingham Thos. Bath, taylor. (Mr. Wingate, Bath; and Mr. Highmore, Bush lane, Cannon street.

Binns Jonas, Oxford street, founder. (Mr. Hannam, Piazza, Covent garden.

Birket R. Gloucester street, Queen square, taylor. (Mr. Mills, Vine street, Piccadilly.

Boyd B. and C. Hanbury, Catherine court, Tower hill, corn factors. (Mr. Druce, Billiter square.

Brown John, late of Long lane, Bermondsey, tanner. (Messr. Gale and Son, Bedford street, Bedford row.

Carroll James, Hoxton square, Shoreditch, victualler. (Mr. Darby, Gray's inn square.

Claugh G. Derby, grocer. (Messrs. Harrison and Radford, Derby.

Chambers Samuel, Maidstone, Kent, corn merchant. (Mr. Druce, Billiter square.

Chance Edw. Bury street, Bloomsbury, grocer. (Mr. Pritchard. Essex street, Strand.

Chiddell James, Southampton, porter merchant. (Messrs. Daman and Warner, Romsey.

Clowes Jas. Birmingham, jeweller, dealer, and chapman. (Mr. Webb, High street, Birmingham; and Messrs. Baxter and Martin, Furnival's inn.

Collier Rob. Bond court, Walbrook, wine merchant. (Mr. Allston, Freeman's court, Cornhill.

Common R. of North Shields, grocer. (Mr. Barker, North Shields; and Mr. Settree, St. Mary Axe.

Coward Thos. Bath, linen draper. (Messrs. Clarke and Son, Bristol; and Messrs. Jenkins, James, and Co. New inn.

Croose Thos. of Picket street, Strand, linen draper. (Mr. Sweet, king's Bench walk, Temple.

Cooper W. H. Field House, Walworth common, surveyor. (Mr. Hughes, Christchurch passage, Newgate street.

Chinnery F. Oxford street, linen draper. (Messrs. Wadaron, Barlow, and Co. Austinfriars.

Davis T. Tarvin, Cheshire, corn factor. (Mr. Garner, Chester; and Mr. Huxley, Temple.

Davis J. K. Edgeware road, Deal. (Messrs. Rogers and Son, Manchester buildings, Westminster.

Dawson Thos proctor, Brydges street, Covent garden, stationer. (Messrs. Richardson, Fisher, and Co. Bury street, St. James's.

Dixon W. and H. Rotherhithe, Surry, timber merchants. (Mr. Courteen, Walbrook.

Donnithorne Isaac, Truro, Cornwall, victualler. (Mr. Edwards, Truro.

Dore Fred. High street, Borough, upholsterer. (Mr. Pearse, Salisbury square.

Doyle J. Covent garden market, chinaman. (Messrs. Naylors, Newport street, Long Acre.

Duckworth John, Ashford, Kent, wine merchant. (Mr. Taylor, Field court, Gray's inn.

Duncan Wm. Thatched-house court, St. James's street, working jeweller. (Mr. Gaines, Hart street, Bloomsbury.

Dunsford J. Plymouth, cutler. Mr. Partridge, Tiverton. (Mr. Corynton, Plymouth; and Mr. Alexander, New square, Lincoln's inn.

Elliott E. Pratt street, Lambeth, victualler. (Mr. Few, Henrietta street, Covent garden.

Fiude Chas. Fenchurch street, hardwareman. (Mr. King, Castle street, Holborn.

Forge Wm. Sutton, Holderness, York, thrashing machine maker. (Mr. Dickinson, Hull; and Rosse and Son, Bartlett's buildings.

Gibbs R. Bristol, dealer. (Messrs. Meredith and Robins, Lincoln's inn.

Gibson John, Liverpool, taylor. (Messrs. Daltera and Topham, Liverpool; and Messrs. Shepherd and Adlington, Bedford row.

Gissing Thos. Borough road, Surry, shopkeeper. (Mr. Isaacs, Bevis market, St. Mary Axe.

Green Wm. Brown's lane, Spitalfields, dyer. (Mr. Freame, Great Queen street, Lincoln's inn fields.

Griffiths John, Hill, Millbrook, Hants, slater. Mr. Ridding, Southampton.

Goodwin W. Gosport, Hants, baker, (Mr. Cruickshank, Gosport; and Bleasdale and Co. New inn.

Haynes Thos. Fristol, Chymist. (Mr. Jacobs, Bristol; and Mr. Gabell, Lincoln's inn.

Hey J. Lombard street, Fleet street dealer in spirituous liquors. (Mr. Robinson, Charter-house square.

Hills J. of Leeds, Kent, miller. (Mr. Cooke, Maidstone; and Mr. Webb, St. Thomas's street, Southwark.

Hinde J. Whitechapel, tin plate worker. (Mr. Hodgson, Surrey street, Strand.

Hirst Henry, Lingard's wood, Almanbury, York, clothier. (Mr. Battye, Huddersfield; and Mr. Battye, Chancery lane.

Hood D. Sun street, Bishopsgate, colourman. (Mr. Harding, Primrose street.

Houlden Rob. St. Margaret's hill, Borough, linen draper. (Messrs. Foulker and Beckitt, Holborn court, Gray's inn.

Jackson Samuel, Raikes, Birmingham, button maker. (Mr. Dolphin, Birmingham; and Mr. Johnston, Hall stair, Temple.

Jacob John, Carisbroke, Isle of Wight, miller. (Messrs. Clarke and Sewell, Newport, Isle of Wight.

Jones John, Whitechapel road, cord wainer. (Mr. Metcalfe, Basinghall street.

Ivory John, Mark lane, broker. (Mr. Murray, Birchin lane.

King Wm. of Newport, Isle of Wight, miller. (Mr. Griffith, Newport.

Lewis J. Fashion street, Spitalfields, victualler. (Mr. Godmond, Bride court, Blackfriars.

Lock Phillip, Nailsworth, Horsley, Gloucester, yarn maker. (Mr. Wathen, Stroud; and Shepherd and Adlington, Bedford row.

Lowton Edward, Mark lane, merchant. (Messrs. Day and Hammerton, Lime street.

Lyon John, North place, Gray's inn lane, money scrivener. (Mr. A. Isaacs, Bevis marks, St. Mary Axe.

Malcolm W. Watling street, warehouseman (Mr. Bovil, New Bridge street, Blackfriars.

Martin J. Millbrook, Cornwall, surgeon. (Mr. Lugger, George street, Plymouth dock; and Blaclock and Co. Temple.

Marsden Wm. Leeds, merchant. (Messrs. Upton, Nicholson, and Co. Leeds; and Lambert and Sons, Hatton garden.

M'Leod James Cranford, Huntley hotel, Leicester fields, merchant. (Messrs. Forbes and Co. Ely place.

Metcalf Wm. Banks mill, Durham, miller. (Mr. Maynard, Durham; and Mr. Pringle, Greville street, Hatton garden.

Mears H. Greenwich, tavern keeper. (Mr. Shepherd, Dean street, Canterbury square, Southwark.

Moody H. Saltfleet, All-saints, Lincoln, jobber. (Mr. T. Phillips, Louth; and Mr. Barber, Gray's inn square.

Morrish W. Bath, cheesemonger. (Messrs. Watts and Griffiths, Bath; and Messrs. Nethersole and Portal, Essex street, Strand.

Moss J. jun. Newbury, timber dealer. (Messrs. Hall and Woodham, Newbury; and Mr. Gregory, Clement's inn.

Mowbray A. Durham, wine merchant, Newcastle-on-Tyne. (Mr. Reed, Newcastle, or Mr. Fairless, Staple's inn.

Munro James, Clipstone street, Mary-le-bone, taylor. (Messrs. Wilkinson and Young, Margaret street, Cavendish square.

Nicholls Thos. jun. of Bradford, Wilts, linen draper. (Messrs. Clarke and Son, Bristol; and Messrs. Jenkins, James, and Abbot, New inn.

Nicholson H. Charlton Crescent, Islington, merchant. (Mr. Harding, Primrose street, Bishopsgate street.

Niven A. Great Prescot street, Goodman's fields, master mariner. (Mr. Nind, Throgmorton street.

Ockenden Rich. Bopeep, Hastings, Sussex, dealer. (Mr. Barnard, Alfriston, Lewes; and Mr. Turner, Bouverie street.

Palmer Geo. Plymouth, Hosier. (Messrs. Street and Wolfe, Philpot lane.

Parmeter John, Borough, Aylsham, Norfolk, miller. (Mr. Shaw, Aylsham.

Parsons John, Bread street hill, callenderer. (Messrs. Payne and Morshed, Aldermanbury.

Pass Wm. Thos. and Jacob, Bailey of Dockhead, Bermondsey, brewers. (Mr. Lee, Three Crown court, Borough.

Patterson John, Woolwich, grocer. (Mr. Maugnall, Warwick square, Newgate street.

Paulden Edw. Cateaton street, warehouseman. (Mr. Caldwell, Manchester; and Mr. Hurd, Temple.

Phillips Thos. Plough court, Lombard st. merchant. (Mr. Sherwood, Cushon court, Old Broad street.

Perry F. Finsbury square, merchant. (Messrs. Palmer, Tomlinson, and Co. Copthall court, Throgmorton street.

Preston Wm. Leeds, merchant, dealer and chapman. (Messrs. Upton, Nicholson, and Co. Leeds; and Lambert and Son, Hatton garden.

Purnell Rob. Newent, Gloucester tanner. (Messrs. Tovey and James, Newnham; or Mr. James, Gray's inn.

Richardson Joseph, Birmingham, dealer. (Mr. Whateley, Birmingham; and Messrs. Swaine, Stevens, and Co. Old Jewry.

Riley Joseph, Mutton lane, Hackney, baker. (Mr. Bond, Secthing lane, Tower-st.

Robinson Francis, of Bordesley, Warwick, boot maker (Mr. R. Webb, High street, Birmingham; and Messrs. Baxter and Martin, Furnival's inn.

Robinson Rob. Kendal, coal merchant. (Mr. John Petty, Kendal; and Mr. J. Fothergill, Clifford's inn.

Ross Geo. New Basinghall street, merchant. (Mr. Wilde, Warwick square, Newgate street.

Rutlidge Thos. Reading, Berks, hatter. (Mr. J. W. Bozen, Plymouth dock; and Messrs. Williams and Drake, Princes street, Bedford row.

Salts Thos. Preston, Lancaster, plumber. (Mr. Dixon, Preston; and Mr. Ellis, Chancery lane.

Sanders Sam. Dove row, Hackney fields, and Walbrook, wine merchant.

Schofield John, Skipton, York, money scrivener. (Messrs. Alcock and Preston, Skipton; and Messrs. Exley and Stocker, Furnival's inn.

Schofield John, Slaithwaite, Huddersfield, York, cotton manufacturer. Mr. Stephenson, Huddersfield; and Mr. Battye, Chancery lane.

Sellers Robert, Sculcoats, York, grocer. (Mr. Galen Haire, Parliament street, Hull; and Messrs Edmunds and Son, Exchequer office of Pleas.

Shepherd Wm Cheson, Nottingham, iron merchant. (Mr. Payne, Nottingham; and Mr. Taylor, Field court, Gray's inn.

Slade Thos. sen. and jun. Bartholomew close, Smithfield, oil merchant. (Mr. Tilson, Chatham place, Blackfriars.

Smith Geo. Newcastle-on-Tyne, woollen draper. (Mr. Bambridge, Newcastle-on-Tyne; and Mr. Atkinson, Chancery lane.

Spottiswood J. Token-house yard, money scrivener. (Watson and Plumbtree, Lamb's buildings, Temple.

Stelling R. Norton, York, wool dealer. (Mr. Lister, Scarborough; and Mr. Williams Red Lion square.

Stephenson Thos. Rochdale, Lancaster common brewer. (Mr. John Law, Manchester; and Mr. Philip Hurd, King's Bench walk.

Store Jacob, Bridge road, Lambeth, seedsman. (Mr. Clutton, Thomas street, Borough.

Sunnock Thos. Ratcliff-high-way, carpenter. (Mr. Hughes, Christ Church passage, Newgate street.

Stokes T. Chepstow, money scrivener. Mr. Cooke, Bristol; and Mr. James, Gray's inn square.

Syms Geo. Vine street, Minories, merchant. (Mr. Wilde, jun. Castle street, Falcon square.

Taylor Joseph, Ware, Herts, ont dealer. (Mr. Bond, Secthing lane, Tower street.

Taylor John, Great Tower street, woollen draper. (Mr. Tomlin, Aldermanbury.

Tucker J. Tiverton, watch maker. (Mr. Rendell, Tiverton; and Mr. Lys, Tooke's court, Chancery lane.

Verrall W. Uckfield, Sussex, grocer. (Mr. Gwynne, Lewes; and Mr. Turner, Bouverie street, Fleet street.

Walker J. Blackman street, Borough, linen draper. (Mr. Hartley, New Bridge street, Blackfriars.

Wainwright Jas. Sheffield, York, builder. (Mr. Tattershall, Sheffield; and Messrs.

Blakelock and Makinson, Elm court, Temple.

Wallis John, Croydon, taylor, dealer and chapman. (Mr. Jones, Martin's lane, Cannon street.

Watson M. C. Charlotte street, Bloomsbury, laceman. (Mr. Watkins, Stone buildings, Lincoln's inn.

Whitaker John, Francis street, Tottenham court road, bookbinder. (Mr. Hurd, Temple.

Winch R. Shoe lane, press maker. (Mr. Lee, Castle street, Holborn.

Wilcox Wm. Parson's green, Fulham, victualler. (Mr. Bousfield, Bouverie street, Fleet street.

Wilks James, St. James's street, gun maker. (Mr. Parry, Charlotte street, Portland place.

Willis John, Pudding lane, merchant. (Messrs. Swain, Stephens, and Maples, Old Jewry.

Worr J. Little Cheapside, Finsbury square, butcher. (Messrs. Palmer, Tomlinson, and Co. Copthall court.

Wright R. Watling street, warehouseman. (Mr. Bovil, New Bridge street, Blackfriars.

BANKRUPTCIES SUPERSEDED.

Ann and John Chadwick, of Bradley green, Chester, hatters.

Wm. Hodgkinson, of East Retford, Notts, ironmonger.

W. Ogle, of Newcastle-on-Tyne, spirit-merchant.

A. Watson, of Walworth, Surry, corn chandler.

DIVIDENDS.

Adams T. High street, Borough, inn-holder, 3 March.

Allen J. Rotherhithe, coal merchant, 18 April.

Arman J. Darlington, Durham, money scrivener, 26 Feb.

Ashton T. Blackburn, Lancaster, dealer, 5 March.

Bailey Geo. and John Jaffray, Middlesex, merchant, 22 Feb.

Batterbee B. King's Lynn, Norfolk, haberdasher, 21 Feb.

Barclay J. Old Broad street, merchant, 20 March.

Binns T. Great Barlow street, Mary-le-bone, candle manufacturer, 3 March.

Bland J. and J. Satterthwaite, Fen court, Insurance brokers, 20 Feb.

Bloxham Sir M. T. Wilkinson, and W. Bloxham, Gracechurch street, bankers, 17 Feb.

Bowers N. W. and W. Cannon street, comb makers, 26 Feb.

Bowers J. Manchester, inn keeper.

Brooke J. Hartshead, York, merchant, 5 March.

Chipchase R. Poultry, linen draper, 20 Feb.

Clarkson H. Liverpool, porter dealer, 16 Feb.

Clough T. Bramley, York, clothier, 19 Feb.

Cole J. Marnhull, Dorset, woolstapler, 5 March.

Cotton L. Fenchurch st. mercht. 10 Feb.

Cross W. Lombard street, banker, 6 March.

Davies T. Haverford West, mercer, 10 March.

De la Cour Albert, Lisle street, Leicester square, jeweller, 13 March.

Dingle W. Exeter., flour merchant, 19 March.

Dunnage Sam. St. Paul's Church yard, trunk maker, 21 April.

Easton W. and R. jun. Bucklersbury, London, warehouseman, 3 March.

Edmunds E. Monument yard, wine merchant, 10 March.

Edwards G. Louth, Lincoln, spirit merchant, 16 March.

Emdin A. Portsmouth, shop-keeper, 3 March.

Faulkner T. Manchester, and Faulkner and Gibson, Queen street, Cheapside, merchants, 16 March.

Fowler W. Distaff lane, wine merchant, 27 Feb.

Gatty J. Oxford street, ironmonger, 19 March.

Gaslak J. G. White Horse street, Stpney, tallow chandler, 10 March.

Godden W. Cranbourn alley, Leicester fields, linen draper, 17 March.

Goss T. Hackney road, apothecary, 27 Feb.

Groncock F. Drayton in Hales, Salop, merchant linen draper, 8 March.

Hancock J. Sheffield, merchant, 23 Feb.

Harris Geo. Bristol, grocer, 26 Feb.

Hiscocks Z. Bristol, draper, 1 March.

Hodges Thos. Warehorn, Kent, dealer, 21 Feb.

Hope W. Brampton, Cumberland, cotton manufacturer, 23 Feb.

Horn N. St. Martin's lane, merchant, 6 March.

Horton J. Cock hill, Shadwell, cheesemonger, 22 Feb.

Horkyn W. Cawsand, Cornwall, brewer and maltman, 10 March.

Houghton J. Liverpool, merchant, 1 March.

Hunter James, Whitehaven, mercer, 21 Feb.

Jackson J. Farnham, Surry, surgeon, 27 Feb.

Jackson P. Manchester, small ware manufacturer, 1 March.

Jacob M. Berner street, Commercial road, dealer, 26 Feb.

Jones J. Wood street, Cheapside, Leghorn hat manufacturer, 17 March.

Layton M. White Hart row, Kennington, stone mason, 3 March.

Lee J. Islington, timber merchant, 24 March.

Loat R. Long Acre, ironmonger, 26 Feb.

Lounitz B. and W. Risson, Fenchurch street, warehousemen, 3 March.

Lowes D. and J. H. Rigg, Hart street, Covent garden, rectifiers, 10 March.

Luxton J. Exeter, linen draper, 6 March.

M'Linnan Murdoch, Gracechurch street, haberdasher, 3 Feb.

M'Auley A. London, merchant, 1 March.

M'Kenzie R. King's Arms yard, merchant, 3 March.

Makeham J. Upper Thames street, cheesemonger, 10 March.

More Walter, Halesworth, Suffolk, saddler, 21 Feb.

Moreley H. Lawrence Pountney hill, and J. Whilden, Copthall court, merchant, 20 March.

Nixon J. Duke's place, Pimlico, carpenter, 3 March.

Oakley F. Hereford, woolstapler, 3 Feb.

Palkie S. R. Little Hempston, Devon, coal merchant, March 8.

Palmer E. Old Jewry, paper hanger, 10 March.

Perrin J. Portwood, Chester, cotton manufacturer, 8 March.

Potts J. White Bear yard, Back hill, looking glass maker, 11 March.
Rhodes E. Leeds, carrier, 23 Feb.
Riley H. Halifax, York, cotton spinner, 21 Feb.
Roughsidge W. Wootten-under-edge, Gloucester, vintner, 7 March.
Rudd L. L. and F. Newcastle-on-Tyne, milliners, 26 Feb.
Russell J. Altham mills, Lancaster, miller, 22 Feb.
Salter J. Bermondsey, New road, carpenter, 3 March.
Smith W. Portsea, linen draper, 1 April
Smith J. S. Liverpool, shoe maker, 10 March.
Southall Sam. and J. Drakeford, Birmingham, factor, 30 Jan.
Southcombe Geo. Bristol, Butter factor, 23 Feb.
Sowley R. Knowles, Warwick, corn factors, 4 March.
Steel Messrs. J. and W. and C. Johnstone, Lancaster, woollen drapers, 14 Feb.
Stone T. Wilton, Hereford, corn factor, 5 March.
Taylor J. Spitalfields, baker, 3 March.
Tharon S. Stone, Stafford, corn dealer, 7 March.
Tindle T. Whiteley, Northumberland, farmer, 27 March.
Tomlinson J. Barlaston, Stafford, boat-builder, 3 March.
Whateley J. Bankside, Surry, colour manufacturer, 17 March.
Wilson R. H. Wakefield, York, factor, 26 Feb.
Wilson E. St. James's street, hatter, 10 March
Williams D. Shoreditch, linen draper, 17 March.
Young James, Queen street, merchant, 10 March.
Young W. Weston, Cadoxton, Glamorgan, miller, 21 Feb.

CERTIFICATES.

Ainsworth J. New Sleaford, Lincoln, linen mercer.
Alton W. Alfreton, Derby, inn keeper.
Barratt B. Bath, butcher.
Barton E. Wellingborough, Northampton, currier.
Benwell T. Newman street, Oxford street, coach maker.
Bristow C. Newgate street, linen draper.
Brodbelt T. Bolton le Moir, Lancaster, muslin manufacturer.
Broster T. Liverpool, stationer.
Brown J. J. Great Queen street, Lincoln's inn fields, glass grinder.
Buddle W. Chenies street, Bedford square, carpenter.
Cannon R. Kingsland road, builder.
Chatterton W. Waltham, Lincoln, grocer.
Chaubaud H. Plumbtree street, Bloomsbury, jeweller.
Chichley E. P. Frog lane, Islington, lint manufacturer.
Clarke J. Hackney road, butcher.
Conder, J. Moorfields, paper hanger.
Cotton H. S. Cuckfield, Sussex, schoolmaster.
Cundy N. grocer, Marlborough street, surveyor.
Cutler W. jun. Warminster, Wilts, clothier.
Dallas W. Cushion court, Old Wood street, merchant.
Danson W. Lancaster, woollen draper.
Davidson J. East India chambers, merchant.
Dibdin C. Strand, music seller.
Dowling H. Castle street, St. Martin's fields, linen draper.
Downs R. J. Maid lane, Southwark, baker.
Egginton T. Dean court, St. Martin's le Grand, goldsmith.
Favell E. Widow and J. Cambridge, painters.
Folo W. Cherry Garden street, Bermondsey, timber merchant.
Free H. Broad street, Horslydown, merchant.
Gardner T. Shoreditch, haberdasher.
Garnons C. Holborn, trunk maker.
Giddy W. Truro, chymist.
Gough J. Exeter, dealer
Guillod T. Craven street, Strand, wine merchant.
Hardie D. Russia row, Cheapside, warehouseman.
Harris E. Goulstone square, Whitechapel, stationers.
Hitchcock J. Sculcoats, York, white lead merchant.
Holmes W. Rushall, Stafford, maltster.
Horrocks S. Pendleton, Lancaster, dyer.
Jones T. Cannonile street, warehouseman.
Isaacson J. S. New road, Well close square, money scrivener.
Leach W. Horton, York, woolstapler.
Loison A. Oxford market, wine merchant.
Lowther R. Throgmorton street, merchant.
Malt J. Jermyn street, St. James's, victualler.
M'Cready W. Manchester, dealer.
M'Dowall W. Tottenham court road, linen draper.
Mansell J. Burkingshaw, and Fielding, Sheffield, tool manufacturers.
Metcalf J. New London street, Crutched-friars, merchant.
Mercer H. and J. Forshaw, Liverpool merchants.
Miver A. Totness, Devon, grocer.
Moore J. G. Russell street, Bloomsbury, linen draper.
Napier J. Bucklersbury, merchant.
Pain J. Peckham, Surry, bricklayer.
Reddish T. Bucklersbury, warehousesman.
Richardson J. Westminster bridge road, livery stablekeeper.
Roberts J. Garden row, St. George's fields, baker.
Scott D. South Cadbury, Somerset, jobber.
Shelley G. Whitechapel, hoser.
Spencer J. Manchester, victualler.
Stratton G. Piccadilly, ironmonger.
Towne J. Oxford market, carcass butcher.
Turpin R. Manchester, dealer.
Ward J. Stockton, Durham, master mariner.
Weston T. Camberwell, post master.
Wilmot J. East Markham, Notts, butcher.
Winter J. and J. Acre lane, Brixton causeway, builders.
Woollyar R. West Cowes, smith.

PARTNERSHIPS DISSOLVED.

J. Ashton and G. Cambell, of Manchester, rope makers.
J. Peel and J. Jefferson, of Newcastle-on-Tyne, printers.
G. Hunter and W. Wilkes, of Leeds, cloth merchants.
J. Shepherd and W. Rhodes, of Leeds, merchants.
J. Alps and W. Smith, of Cheapside, hosiers.
M. Chester and P. Chell, of London, warehousemen.

J. Collinson and W. Powell, of Lambeth Marsh, hat manufacturers.

H. Gregory, B. Cook, and J. B. Tayler, of Patticroft, Lancaster, cotton spinners.

Messrs. T. and W. Barker, of Golden Hill, Stafford, iron workers.

Eben. J. Collett, W. Rickford, D. Baron, and W. Trells, of Hamelhampstead, bankers.

James Ferguson, sen. and jun. Borough, hop factors.

H. Johnston and J. Todd, of Berwick, grocers.

W. Jones, C. Pritchard, and Hugh Ley, of Mount street, Grosvenor square, apothecaries.

E. Rathbone and T. Brecklehurst, of Macclesfield, silk throwsters.

Elizabeth and W. Scott Deighton, of Long lane, Smithfield, tallow chandlers.

J. C. Mertz and D. Zurherst, of London, brokers.

Thomas Cobbs and J. Hicks, of Newgate street, grocers.

W. Wilson, R. Jackson, and A. Holmes, of Bear garden, Southwark, anchorsmiths.

J. D. May and Fred. Noble, of Lombard street, bill brokers.

J. and P. Tayler of Manchester, cotton spinners.

S. Y. Thompson and H. Walds, of Poole, plumbers.

Harry Coe and J. Walker, of Shelford, Bedford, wine merchants.

W. Master and T. Hagger, of Potton, Bedford, straw plat manufacturers.

T. Richardson sen. and jun, of Weymouth, stone merchants.

R. C. Smith, J. Smith, T. Smith, and T. Pooley, of St. Margaret's hill, hosiers

Keene and Co. South Audley street, tailors.

Stavert and Co. Liverpool.

J. Diplock and Ann Welden, Great Hermitage street, linen drapers.

Every and George, Hanway street, breeches makers.

Manning and Jackson, Lynn, wine merchants.

Kruse and Brettell, Broad street, merchants.

Riley and Co. Wadsworth, cotton spinners.

Townsend and Co. Crane court, printers.

W. and M. G. Featherstonhaugh, London, bottle merchants.

W. and E. Goodwyn, Lynn, surveyors.

Sutcliffee and Co. Hepstonstall, cotton spinners.

Holmes and Whitteron, Paternoster row, booksellers.

Wadham and Payne, Bristol, glass sellers.

Andrews, Hornbrook, and Cummins, Tavistock, rope makers.

Wright and Fawcett, Oldham, liquor merchants.

Jackson and Co. chymists.

Evans and Co. Derby, tin plate manufacturers.

Goodwin and Lewis, Newtown, flannel merchants.

Chaplain and Co. Cateaton street, ironmongers.

Chapman and Co. Sheffield, scissar smiths.

Windsor and Simons, Bunhill row, blacking manufacturer.

Wild and Co. Rochdale, coal miners.

Lowe and Anderson, Berkeley street, jewellers.

Lor and Co. Manchester, calenderers.

Hackney and Grieve, Dowgate hill.

Henley and Thomp s Mill street, silk mers.

Murray and Bibby, Manchester.

Guest and Wilson, Newgate street, silversmiths.

Sangster and Worster, Fleet street, umbrella makers.

Wright and Bettesworth, Cranborn street silversmiths.

Kemp and Co. London, linen drapers.

Rideing and Jackson, sen. Liverpool, merchants.

W. and H. Marchant, Drury lane, woollen drapers.

Sarah Bentley, Eliz. Masters, and Mary D. Card, New Bond street, milliners.

Biddle and Hudson, Birmingham, factors.

Falkner and Cooke, Southwell, surgeons.

Cantrell, Stevenson, and Pollitt, Pendleton, &c. cotton merchants and thread manufacturers.

Melladuw and Haworth, Rochdale, woollen manufacturers.

Dagge and Co. Cornwall, brewers.

Standford and Lambert, Bulwell, bleachers.

Bailey and Wadsworth, Bishopsgate street, grocers.

J. and J. Brown, Manchester, grocers.

Ketland and Co. Birmingham, gun makers.

Smith and Carr, Nottingham, British lace manufacturers.

Gregson and Co. Love Clough, within Rossendale, calico printers.

F. Reeves and A. Oxley, Bristol, twine spinners.

T. Blinman, T. Gadd, and T. Stock, Bristol, coppersmiths.

G. Jones, J. Smart, C. Glover, and F. Bird, Aston, Warwickshire, glass makers.

P. Kempson and B. Hughes, Birmingham, millers.

T. Evans, W. Strutt, and W. E. and W. Evans, Derby, cotton spinners.

C. F. Rawlings and J. Davis, Bristol, tanners.

M. Cowell and W. Hickinbotham, Old Ford, brewers.

M. and R. Chadwick, J. Jackson, M. Worthington, and J. Goodhear, Yewtree, Lancashire, wool scribblers.

J. Cunningham and J. Wilson, Leeds, stone masons.

J. Savery, W. Towgood, J. F. Tuffin, J. Yerbury, and J. Pugh, Bristol, bankers.

J. Rideing and W. Jackson, sen. Liverpool merchants.

J. and D. Lees, Oldham.

J. Cuthell and P. Martin, Holborn, booksellers.

T. Willett and J. and R. Ennesley, Finsbury square.

R. Rigsby and H. Wells, Nottingham, attornies.

H. and S. F. Fourdrinier, M. Towgood, jun. C. Fondrinier, and J. B. Hunt, Sherborne lane, wholesale stationers.

J. Ham and S. Shrimpton, Alcester, Warwickshire, needle makers.

J. Brooke and H. M. Owen, Liverpool, brewers.

N. Longbottom and R. Scholefield, Wakefield manufacturers.

G. Withy and J. Howell, Bristol, woollen drapers.

E. Baxter, W. Croft, and J. Robinson, Manchester, manufacturers.

M. Sawer and T. Bailey, Leeds, bankers.

W. Midgley, J. and W. Holme, and R. Butterworth, Rochdale, cotton spinners.

T. Heath, J. Roscoe, G. Gudlog, and T. Lee, Little Bolton, brewers.

M. Atkinson, jun. and W. Atkinson, Leeds, woolstapers.

J. Gunn and S. and T. Newbold, Measham, tanners.

J. Younge and G. Page, Bermondsey street, hair merchants.

W. W. Bromby and J. Rounding, Hull.

D. G. and R. Fotherby and S. Ransom, Boston, plumbers.

W. Moon and J. Waterland, Kingston-upon Hull, wine dealers.

R. Hutchinson and W. Aemsley, Monkwearmouth shore, Durham, coal dealers.

J. W. and J. Clapham, jun. Leeds.

R. Tomas and J. Cooper, Sheffield, pawnbrokers.

J. Wood, J. Tittler, P. C. Marrow, W. Smith, and T. Yelverton, Liverpool, provision merchants.

R. Hooper and T. Jackson, Nottingham, hosiers.

J. Westcott and P. Hickes, Bristol, brass founders.

Downes and Davies, Manchester, hat manufacturers.

Lavington and Des Moulins, Abchurch lane, tailors.

J. Dando, S. Hill, and S. Dando, Rosomand street, Clerkenwell, silk hat manufacturers.

J. and E. Pickard, Birmingham, mealmen.

T. Tipping, J. Sharples, and T. Tipping, jun. Blackrod, Lancaster, calico printers.

J. Sharpe, J. W. Keene, and J. Caswell, Birmingham, factors.

E. Griffith, W. Dunn, and S. Hart, Birmingham, patent lamp manufacturers.

J. Pagau, T. H. Payne, and A. Bagnell, Great Tower street, insurance brokers.

Josiah Emes and S. Carpenter, of Birmingham, jewellers.

T. G. and W. Simmond, of Liverpool, merchants.

T. Bradford and J. Johnson, of Chester, linen drapers.

J. Leach and A. Slater Smith, of Merton, Surrey, copperplate engravers.

T. Bulson and W. S. Ritchie, of Monkwell street, Silver street, glaziers.

J. Barnard, G. Barnard, and T. Parsons, of Newbury wharf, Berks, bargemasters.

J. and M. Skidmore, 123, High Holborn, and Coppice row, Clerkenwell, grate makers.

R. and T. Skilton, of Edmonton, carpenters.

J. Johnson and J. Etheridge, Halfway house, Southampton, grocers.

W. Prance Miles Hammet, J. Allen, and J. Ivory, Plymouth, wool-staplers.

R. Abbey, J. Locks, and J. Gullett, Pancrass lane, tea dealers.

J. E. C. Andra, F. P. Garland, R. Harrison, E. Marshall, and J. Thorpe, of Newark on Trent, stone and marble masons.

Simeon Lord and S. Sandiford, of Fecit, Lancaster, callico printers.

J. Tompkins and J. Alsopp, of Grantham, Lincoln, cabinet makers.

J. Kernot and J. B. Austin, of Bear street, Leicester square, druggists.

W. Teedon and J. Paty, of Salisbury wharf, Strand, timber merchants.

Importations at Liverpool, from 18th to 25th January.

West-Indies.—70 tons logwood, 65 ditto lignumvitæ, 80 tierces coffee, W. Forbes and Co.; 112 tons logwood, 5 ditto lignumvitæ, for W. Malcolm; 78 ditto logwood, W. Taylor; 5 ditto lignumvitæ, J. French; 263 pieces lignumvitæ, 128 ditto fustic, 1158 ditto Nicaragua wood, T. White.

Brazils.—40 bags cotton, 1 case ipecacuanha, 16 tons fustic, for T. and G. Hawkes; 41 bags cotton, F. Jordan and Co.; 49 ditto, J. F. Koster and Co.; 35 ditto, Forshaw and Co.; 338 ditto, Lyne, Brothers, and Co.; 40 ditto, J. N. Vizieu and Co.; 10 ditto, G. Roach and Co.; 20 ditto, Lyne, Hathorn, and Co.; 223 ditto, Harrison and Latham; 40 ditto, J. Lyne and Co.; 20 ditto, J. Turner and Co.; 20 ditto, J. C. Lucena and Co.; 100 ditto, H. Burmester and Co.; 3 barrels ipecacuanha, 8 tons fustic, W. Kempe; 22 casks sugar, 13 barrels and casks tallow, 160 bags cotton, Graham, Rigg, and Co.; 26 bags cotton, 1 case sugar, 12 tons fustic, 20 hides, Withers and Martin.

America.—74 bags, 3 pockets cotton, for Sloane and M'Millen; 3 bags ditto, J. Richardson; 219 ditto, 41c. 1q. 20 staves, B. and J. Gray and Co.; 200 barrels turpentine, Coates and Hay; 214 logs pine timber, 16 ditto birch, ditto 56 pine plank, 66c. 25 staves, 9 fathoms lathwood, 40 barrels tar, for G. Geddes and Co.; 106 barrels ashes, 145 tierces flax seed, 60 half barrels flour, 175 barrels tar, for W. and R. Rathbone; 690 barrels pot and pearl ashes, 18c. staves, 309 bags flax seed, for Patterson and Maloney; 62 bales cotton, Morrall and Borland; 4 hogsheads, 49 casks pot and pearl ashes, Hamilton and Graham. The Neptune, E. Stanton, from Wilmington, with 200 tierces rice, 23 hogsheads tobacco, 406 barrels turpentine, 91 bales cotton, Strickland and Brickwood; 212 barrels turpentine, 65 tierces rice, 45 hogsheads tobacco, 234 bales cotton, 1c. 2q. deals, 110c. staves, for Morrall and Borland; 808 bales cotton, 550 barrels turpentine, 110c. staves, for Conway and Davidson; 759 bales cotton, 188 barrels rice, ¼c. 20 pine planks, order; 20 deals, 11 bales cotton, 60 deer skins, for J. and H. Cumming; 445 bales cotton, J. Garnett; 42 ditto, W. Leigh and Co. 14 ditto, order; 374 barrels turpentine, 96 ditto tar, 10c. ditto tar and turpentine, 58¼c. staves, for Martin, Hope, and Thornely; 56

bags, 91 bags, and pieces bags cotton, order; with 389 barrels ashes, 134c. staves 51 hogsheads tobacco, 323 bales cotton, order; 250 barrels ashes, 36 hogsheads tobacco, 400 ditto flaxseed, 100 barrels, 140 half ditto flour, 172 bales cotton, 155½c. staves, 40 deals, 30 pieces pine scantling, for A. M'Gregor and Co.; 15 hogsheads leaf, 1 cask manufactured tobacco, 19 bags, 2 casks coffee, 10 bags pimento, for Worrall and Williamson.

Newfoundland.—327 hogsheads cod liver oil, 137 tierces, 33 barrels salmon, 17 tierces mackarel, 500 quintals fish, for H. Mattbie; 44 casks oil, 35 ditto blubber, 2964 cwt. codfish, 2 fathoms firewood, for Morrall and Borland.

Spain.—108 bags wool, 8 ditto aniniseed, 308 bags nuts, 3½ tons corkwood, 240 bales barilla, for Carfon, Parry, and Co.; 1½ ton corkwood, P. Teffier; 400 barrels raisins, 950 bags shumac, 20 chests, 150 boxes lemons, 10 butts mountain wine, 500 kegs anchovies, 10 barrels almonds, 301 bales barilla, 135 boxes raisins, for Robin and King; 6 ditto, 2 ditto almonds, 1 ditto figs, 2 jars grapes, Downwards and Co.; 1 box almonds, 1 ditto raisins, Graham, Rigg, and Co.

Portugal.—2 pipes wine, for T. F. Dyson; 10 ditto, J. Percival; 10 ditto, Boardman and Gaskell; 10 ditto, J. Knowles; 10 ditto, Lloyd and Salisbury; 49 ditto, J. Winstanley; 60 ditto, 20 hogsheads ditto, T. Seddon and Co.; 100 ditto, 20 ditto, R. Preston and Co.; 10 bags cotton, Lyne, Brothers, and Co.; 210 cwt. corkwood, 2 hogsheads wine, R. Copland; 56 chests, 58 boxes lemons and oranges, 25c. corkwood, 269c. 8 staves, 40 frails figs, for Hughes and Duncan; 69 hogsheads tobacco, J. Brown and Co.; 46 ditto, J. Brown; 137 ditto, J. and J. Dunlop; 73 ditto, Boyd, Miller, and Co.; 50 ditto, J. Heathcote and Co.; 66 ditto, Taylor and Smedley; 10 pipes wine, 40 tons corkwood, for B. Thomas; 12 bags cotton, J. Shone and Co.

Russia.—45 casks tallow, 600 mats, 127 bundles flax, 163 ditto hemp, for Sorgenfrey and R. Graham; 25 ditto, W. J. and J. Leigh.

Sweden.—150 pieces pine timber, 15c. deals and deal ends, 150c. staves, for Jones and Woodville; 1c. 12 deals, 10 cwt. hemp, Conway and Davidson.

From 25th Jan. to 1st Feb.

Brazils.—150 chests sugar, 49 bags cotton, 51 hides, 47 tons fustic, 2 pipes wine, for Harrisons and Latham; 45 bags cotton, J. W. Taylor; 6 ditto, H. Norris; 129 ditto, B. and J. Gray and Co.; 100 ditto, 50 serons tallow, P. de Carvalho; 30 bags cotton, W. Bonker; 25 ditto, ——— M'Kand; 6 ditto, J. Potter; 37 ditto, 11 bags tapioca, A. Maguire; 52 bags cotton, Graham, Rigg, and Co.; 592 bags cotton, 125 chests, 13 serons tallow, 8 pipes.

America.—958 casks ashes, 3 bundles fruit trees, 6 barrels apples, for Morrall and Borland; 36 casks ashes, Mason, Hodgson, and Co.; 250 bags, 92 hogsheads, 26 half ditto flax seed, Earles and Carter; 73 bags ditto, T. and W. Earle and Co.; 973 barrels ashes, 26 hogsheads tobacco, 158 bales cotton, 50 hogsheads bark, 173 hogsheads, 56 half ditto flaxseed, 71 barrels, 120 half ditto flour, 170c. staves, 12 pieces pine scantling, 50 deals, 1 tierce, 1 barrel, 1 half ditto bees' wax, 5 barrels apples, for A. M'Gregor and Co.; with 330 bales cotton, 870 barrels tar, 470 ditto turpentine, 270 ditto flour, 130c. staves, 109 boards, for Martin, Hope, and Thornely; 260 bales cotton, 203 barrels turpentine, A. M'Gregor and Co.; 151 bales cotton, 182 barrels pot and pearl ashes, 108 barrels turpentine, 970 barrels tar, 140c. staves, 2 barrels, 1 half ditto oil of turpentine, 4200 feet pine boards, for Conway and Davidson; 400 bales cotton, 92 barrels ashes, 100c. staves, 4c. deals, for Mason, Hodgson, and Co.; 441 bales cotton, 514 barrels tar, 451 ditto turpentine, Martin, Hope, and Thornely; 175 barrels tar, 15 ditto rosin, 104 tierces, 51 half ditto flaxseed, 15 hogsheads tobacco, 143 tierces rice, 150 bales cotton, 110c. staves, 6 barrels apples, for Hughes and Duncan; 175 barrels tar, 15 ditto rosin, 104 tierces, 51 half ditto flaxseed, 144 tierces rice, 150 bales cotton, 15 hogsheads tobacco, 110c. staves, W. Barber and Co.

Madeira.—200 barrels wheat flour, 90 bags cotton, 24 hogsheads tobacco, 212 barrels turpentine, 64 barrels rosin, 4000 staves, for M'Iver and Co.

Mediterranean.---50 tons brimstone, 60 ditto valonia, 10 ditto boxwood, 16 casks olive oil, for G. James and Co.; 2 tierces ditto, Barclay and Co.

Russia.---148 bundles hemp, 200 ditto flax, 1413 bars iron, 400 mats, for Geller, Focke, and Co.

Prussia—188 bales hemp, 85 ditto flax, 50 bags linseed, 27 deals, 708 mats, for Kearsley, Muller, and Co.

Sweden.---24c. 3q. 17 deals, 1000 deal ends, 8400 staves, for Buchanan and Benn, 112 deals, M. Svanberg; 80 sacks, 60 barrels linseed, order; 1171 bars iron, 50 masts, A. Hargraves and Co.; 6027 deals, 900c. 1q. 21 deal ends, for Sorgenfrey and Graham; 750 deals, 33 fir balks, 12 spars, Martin, Hope, and Thornely

Spain.—2250 boxes, 5600 baskets raisins, 20 cwt. corkwood, for Greaves, Yates, and Co.

Portugal.---128 barrels turpentine, 114 ditto ashes, 78 bales cotton, 150c. staves, 2c. deals, for Morrall and Borland; 65 bales cotton, Lodges and Tooth.

Azores.---17 bales cotton, for Little, Wotherspoon, and Humberston; 295 ditto, T. and G. Hawkes; 49 ditto, F. Nicholson; 7 boxes lemons and oranges, J. Holmes; 60 barrels tar, 98 ditto beef and pork, Buchanan and Benn; 1142 barrels tar, 169c. staves, J. R. Hazard and Co.; 232 bales cotton, order.

From 1st to 8th Feb.

West-Indies.---257 hogsheads, 3 tierces sugar, 17 puncheons rum, 50 bags cotton, 37½ tons Nicaragua wood, for R. Benson and Co.; 41 hogsheads, 1 tierce sugar, W. Goore; 20 hogsheads ditto, France, Fletcher, Yates, and Co.; 55 ditto, J. Willis and Co.; 32 ditto, Prothero and Claxton; 19 puncheons rum, Horne and Stackhouse; 9 ditto, J. Whittle; 30 ditto, W. and S. Hinde; 29 ditto, D. Lyons, jun.; 5 tierces coffee, J. and E. Evans; 14 ditto, 3 serons indigo, F. Jordan and Co.; 190 bales, 85 bags, 70 pockets cotton, J. Garnett; 17 bales, 14 bags ditto, W. C. Lake and Son; 27 bales ditto, J. Simpson; 85 serons ditto, T. Clare and Co.; 1 barrel tortoiseshell, Dutton and Moss; 4 tierces pimento, Corrie, Ainslie, and Co.; 102 bags ditto, W. Dickson; 1 hogshead rum, L. Mana; 27 tons ebony, 1 seron cotton, J. Askew; 1 ditto, 30 bags pimento, order; 1 pipe Madeira wine, for J. Gonthwaite; 1 ditto, Edward Griffin; 1 pipe, 2 hogsheads ditto, W. Sanderson; 1 pipe ditto, A. Worswick; 2 ditto, R. Worswick; 2 ditto, T. Satterthwaite and Co.; 1 ditto, Atkinkinson and Willocks; 1 ditto, W. Coupland; 2 ditto, J. and S. Matthews; 1 ditto, J. G. Foderingham; 1 ditto, J. Leigh; 2 ditto, 2 hogsheads ditto, A. Woodward; 1 pipe ditto, W. Lushington and Son; 159 hogsheads, 31 tierces, 16 barrels sugar, 859 bales cotton; 10 pipes, 1 hogshead Madeira wine, Barton, Irlam, and Co.; 10 bales cotton, Rodie and Shands; 6 pipes, 3 hogsheads, and 1 quarter cask ditto, order; 14 bales cotton, 12 casks, 54 bags coffee, 36 hogsheads sugar, for Rougemont and Co.; 25 ditto, 19 bales cotton, J. Smith; 12 ditto, Princep and Co.; 50 ditto, N. Waterhouse and Co.; 20 hogsheads sugar, R. Leigh; 10 bales cotton, D. William; 10 ditto, E. Gibbons; 40 ditto, J. Daniel and Son; 20 ditto, J. G. Foderingham; 50 casks coffee, Buchanan and Benn; 25 hogsheads sugar, May and Alwyn; 12 bales cotton, 80 bags coffee, Colin, Douglas, and Co.; 7 hogsheads sugar, 2 bales cotton, 6 casks, 2 bags coffee, order; 120 hogsheads, 1 tierce, 100 barrels sugar, for W. Coupland; 103 hogsheads, 1 tierce ditto, W. Walby; 39 hogsheads sugar, Bradshaws and Winder; 50 ditto, J. Robinson; 1 barrel coffee, Strickland and Brockwood; 9 casks, 4 barrels ditto, 61 bales cotton, 18 pipes, 4 hogsheads Madeira wine, 50 pieces yellow sanders, Blount and Kirkham; 72 hogsheads, 81 barrels sugar, J. Aston, Son, and Backhouse; 5 hogsheads ditto, Swan, Brancker, and Co.; 81 hogsheads, 15 tierces, 11 barrels ditto, J. J. W. and J. M'Kennd; 35 bales cotton, J. Weston and Co.; 36 hogsheads, 5 tierces sugar, 50 pieces yellow sanders, Smith and Co.; 60 bales cotton, order; 60 hogsheads sugar, for E. and W. Earle and Co.; 34 ditto, 25 barrels ditto, W. Rigg; 20 ditto, 4 ditto, O'Connor and Co.; 21 ditto, 2 ditto, 1 tierce ditto, J. Leigh and Co.; 20 hogsheads ditto, 8 puncheons lime juice, Bradshaws and Co.; 6 serons indigo, Clarke and Tods.

Importations at the Port of London, from 21st Dec. to 20th Feb. 1810.

RAGS.	TONS.
B. and W. Wood	2
J. Twemlow	14
Smith and Co.	15
Salter and Co.	1
C. Hackett	1
Soltau and Co.	5
Green and Co.	20
Magnay and Co.	3
J. Selig	5
J. and W. Boys	7
R. B. Tucker	2
Rucker and Co.	6
Simeon and Co.	2
R. Smith	4
J. Cotton	6
	93

SPANISH WOOL.	CWTS.
Salter and Co.	130
Harman and Co.	560
G. Dela Torri and Co.	400
Le Mesurier and Co.	50
Garcias and Co.	80
Gibbs and Son	12
F. Fischer	50
J. Waring and Co.	270
A. Gibbs and Son	15
J. Perochin	10
Maitland and Co.	22
J. C. Bernales	150
Pearson and Co.	260
Berthon and Son	30
Laroche and Co.	30
H. Hagedorn	20
Gibbs and Son	50
	2139

SHEEPS' WOOL.	CWTS.
J. Cambell and Co.	50
Mellish and Co.	480
Amyand and Co.	15
Pieschell and Co.	260
Wilson and Co.	50
J. Rapp	80
Blaydon and Co.	400
Pearson and Sons	40
Lyne and Co.	40
T. Kemble	300
Wallmsley and Co.	100
Houghton and Co.	6
Spitta and Co.	20
	1841

FLAX.	TONS.
Thornton and Co.	264
P. Forrester	30
T. Wilson	55
G. Todd	3
W. Atkinson	1
G. Sharpe and Son	34
A. Kruse	60
Harford and Co.	60
Heyman and Co.	25
J. Woollett	4
I. Hill	4
W. Mitchell	45
I. Tullock	3
J. and J. Mackenzie	20
G. H. Hooper	33
I. L. Grier	50
H. Smith	45
W. Frome	25
Baring brothers	20
J. Ramsay	135
T. Fellows	60
J. Perochin	80
Gardner and Co.	10
	1066

HEMP.	TONS.
W. Forrester	12
G. Irving	10
Mellish and Co.	20
M. Stringer	14
G. Sharp and Son	5
G. Peake	370
T. Wilson	20
Bainbridge and Co.	40
Cox and Co.	30
W. Mitchell	50
I. Ramsey	58
J. F. Schroder	10
Rucker and Co.	65
Harford and Co.	85
Heyman and Co.	25
I. Hill	8
Read and Co.	5
Warin and Co.	5
Haywood and Co.	80
A. Brough	30
R. Kiddy	15
A. Kruse	8
C. Grant	40
I. L. Grier	5
H. Smith	70
Enebom and Co.	20
J. B. Inglis	90
G. Flindt	15
Bell and Co.	15
	1220

F

MADDER.	CWTS.
Staniforth and Co.	120
Waugh and Co.	400
Green and Co.	60
R. Hunter	320
	900

SILK.	Thrown. lbs.	Raw lbs.
G. Dorrien and Co.	500	—
Johnston and Co.	670	—
J. Vere and Co.	2950	—
E. Gwatkin	—	210
Doxat and Co.	2670	5500
Minet and Co.	630	—
Penn and Co.	150	—
Cazenove and Co.	2550	800
Patterson and Co.	—	650
Haldemand and Sons	4950	390
Martin and Co.	340	650

SILK.	Thrown. lbs.	Raw. lbs.
Messrs. Favene	4700	—
Cazenove and Co.	1570	630
Princep and Co.	21020	—
J. Motteaux	—	3800
J. Waring	—	800
Gandolfe and Co.	1540	—
Patterson and Co.	—	12850
Sapte and Co.	1410	700
	45950	26990

Prices of Navigable Canal Shares, Dock Stock, Fire Office Shares, &c.

The Trent and Mersey or Grand Trunk Navigation, 1050l. 1030l. dividing 40l. nett per annum.—Staffordshire and Worcestershire, 715l. dividing 40l. nett per annum.—Monmouthshire, 3l. per share half yearly, 132l. to 136l.—Leeds and Liverpool, 156l. to 158l.—Grand Junction, 240l. to 244l.—Kennett and Avon, 50l. 48l. 49l.—Wilts and Berks, 51l. 10s. to 53l.—Huddersfield, 41l. 10s.—Dudley, 49l.—Rochdale, 46l.—Ellesmere, 80l.—Lancaster, 24l. to 25l.—Grand Surrey, old shares, at 65l. with new ditto attached, at par.—West-India Dock Stock at 182l. per cent. ex Dividend of 5l. per cent. nett, half-yearly.—East-India ditto, 135l.—London Dock, 136l. to 136l. 10s. ex Dividend, 2l. 15s. nett half-yearly, 135l.—Commercial ditto, 90l. premium, ex dividend.—Globe Assurance, 129l. per share, ex Dividend, 3l. nett half-yearly.—Atlas, par.—East-London Water-Works, 227l. 228l.—Portsmouth and Farlington ditto, 44l. premium, with new subscription attached.—Thames and Medway, 42l. to 44l. premium.—Basingstoke, 85l. to 87l. 10s.—Ashby-de-la-Zouch, 22l. 10s.

Importations at the PORT of LONDON, for the Month ending 20th Feb. 1810.

Ashes, Pearl and Pot, cwts.	4,670	Rags, tons.	98
Barilla, tons.	2,100	Rape Seed, qrs.	1620
Brandy, galls.	38,100	Rasins, Sun, cwts.	932
Brimstone, cwts.	1,240	Raisins, Smyrna, cwts.	603
Bristles, doz. lbs.	7,920	Rice, tons.	150
Butter, tons	2,000	Rum, galls.	246,000
Cochineal, lb.	2,800	Silk, Thrown, lbs.	45,950
Coffee, cwt.	8,400	——, Raw, lbs.	26,990
Cork, tons	216	Smalts, lbs.	9,800
Cotton, lbs.	61,010	Sugar, cwts.	84,130
Currrants, cwts.	1,810	Tallow, tons	1,218
Flax, tons.	1,066	Tar, bar.	856
Hemp, tons	1,220	Tobacco, lbs.	710,000
Linseed, qrs.	1,617	Wheat, qrs.	150,000
Madder, tons	900	Wine, galls.	843,000
Oil, Olives, cwts.	356	Wool, cwts. Spanish	2,139
Oil, Sperm, tons	89	Wool, Sheep's, cwts.	1,841
Oil, Turpentine, lbs.	2,115		

COURSE OF EXCHANGE.

	Tuesday, 23 Jan.	*Tuesday*, 30 Jan.	*Tuesday*, 6 Feb.	*Tuesday*, 13 Feb.
AMSTERDAM, 2 *Us.*	31 10	32 2	32 0	31 4
Ditto at sight	31 3	31 5	31 5	30 7
Rotterdam, 2 *Us.*	9 17	9 16	9 18	9 14
Hamburgh, 2½ *Us.*	28 9	28 8	28 9	28 6
Altona, 2 *Us.*	28 10	28 10	28 10	28 7
Paris, 1 day's date	19 16	19 16	19 16	19 10
Ditto, at sight	20 0	20 0	20 0	20 0
Bourdeaux	20 0	20 0	20 0	19 14
Madrid ... *Effective*	44	44	44	44
Cadiz	39½	39½	39½	39½
Bilboa	41	41	41	41
Leghorn	60	60	60	60
Genoa	55	55	54	56½
Venice	52	52	52	52
Naples	42	42	42	42
Lisbon	64	64	64	65
Oporto	67	66	64	67
Rio Janeiro	71	71	71	71
Malta	56	56	56	56
Gibraltar	38	38	37	36½
Dublin	9	9	9	9
Cork	9½	9½	10	10

New Dollars 5*s.* 6*d.* per oz.

Agio of the Bank on Holland, 4 per Cent.

Average Price of Corn throughout England and Wales, taken from the London Gazette, for the Week ending 17th February, 1810.

	s.	*d.*		*s.*	*d.*
Wheat	100	0	Pease	58	0
Rye	58	8	Beans	52	11
Barley	48	1	Oats	27	11
Oatmeal	50	1	Beer or Big	37	0

CORN EXCHANGE.—Price of Grain, 19th Feb. 1810.

Wheat	64	to	86	Boilers	64	to	74
——, fine,	96	—	102	Gray	38	—	44
——, superfine,	104	—	106	Beans, new,	52	—	60
Rye	40	—	46	Ticks	32	—	39
Barley	28	—	42	Oats	20	—	27
——, fine,	42	—	48	Polands	30	—	36
Malt	70	—	80	Fine Flour	85	—	90
White Pease	70	—	74	Seconds	75	—	85

Per sack of 5 bushels, or 280 lb.

PRICE OF CORN AT LIVERPOOL, 13th Feb. 1810.

	s.	d.	s.	d.		s.	d.	s.	d.	
Wheat, English	15	9	to 16	0	per 70lbs.	Barley, Scotch	5	9	— 6	3	per 60lbs.
—— New Ditto	14	0	—14	9	ditto.	Malt, Fine	13	3	—13	6	pr 36 qts.
—— American	15	6	—15	9	ditto.	—— Inferior	10	9	—11	9	ditto.
—— Quebec	13	0	—13	6	ditto.	Beans, Small	62	0	—64	0	per qr.
—— Irish	10	6	—13	6	ditto.	—— Tick	61	0	—62	0	ditto.
Oats, Potatoe	4	0	— 4	1	per 45lbs.	Peas, White	70	0	—90	0	ditto.
—— Limerick	3	11	— 4	0	ditto.	—— Grey	48	0	—55	0	ditto.
—— Waterford	3	9	— 3	10	ditto.	Flour, Fine	32	0	—34	6	pr 280lbs.
—— Cork	3	7	— 3	9	ditto.	—— Seconds	79	0	—81	0	ditto.
—— Wexford	3	5	— 3	6	ditto.	—— Am.	58	0	—60	0	pr 196lbs.
Barley, English	7	3	— 7	6	per 60lbs.	—— Do. Sour	48	0	—50	0	ditto.

SMITHFIELD MARKET.

To sink the Offal, per Stone of 8lbs.

Beef	4	5	to 6	6
Mutton	5	4	— 6	8
Veal	5	0	— 6	8
Pork	6	0	— 7	4
Lamb	0	0	— 0	0

NEWGATE AND LEADENHALL.

By the Carcass.

Beef	4	10	to 5	6
Mutton	4	6	— 5	6
Veal	4	6	— 6	6
Pork	6	0	— 7	0
Lamb	0	0	— 0	0

PRICE OF HOPS.

Kent, bags,	£4	0	to 5	15	Kent, pockets,	£3	15	to 6 10
Sussex	4	0	— 4	10	Sussex	3	10	— 4 4
Essex	4	0	— 5	0	Essex	8	0	— 10 0

Average Price of Brown or Muscovado Sugar 52*s.* 10½*d.* per cwt. exclusive of Customs and Excise payable thereof.—*T. Nettleship, Clerk of the Grocer's Company.*—From London Gazette of 24th Feb. 1810.

HAY AND STRAW.—Per Load.

ST. JAMES'S MARKET.								
Hay	£4	0	0	to	6	12		
Clover	7	0	0	—	—	—		
Straw	2	11	0	—	3	0		
WHITECHAPEL.								
Hay	5	5	0	—	6	14		
Clover	£6	10	—	7	16			
Straw	2	8	—	2	16			
SMITHFIELD.								
Hay	5	15	—	6	6			
Clover	6	6	—	7	0			
Straw	2	2	—	2	10			

PRICE OF COALS.

Newcastle	64	0	—	70	0	Cinders	40	0	—	—	—
Sunderland	60	0	—	70	0	Other Coals	60	0	—	73	—

Delivered at 12*s.* advance on the above prices.

POTATOES per Ton, at SPITALFIELDS.

Kidneys	£4	0	to 5	10	Ox-Nobles	£3	0	to 3 15
Champions	4	0	— 4	10	Common Red	2	10	— 3 0

FEBRUARY 21*st*, 1810.

B. signifies Barrel; Bl. Bushel; Ch. Chest; C. 112lb. D. Dozen; G. Gallon; H. 100, and of Deals 120; J. Jar of Oil of 24 Gallons; and a ½ Chest of Oil 30 Flasks, or 4 Gallons; Lt. Last, or Barrels of Pitch, containing 31½ Gallons each; Q. Quarter, of 8 Bushels; T. Ton or 20 cwt; Tu. Tun of 252 Gallons.—NOTE. Wine is sold by Gauge, viz. Port per Pipe of 138 Gallons; Bucellas and Lisbon per Pipe of 140 Gallons; Sherry per Butt of 150 Gallons; Madeira per Pipe of 110 Gallons; Mountain per Butt of 126 Gallons; Vidonia per Pipe of 120 Gallons; Rhenish per Aum of 36 Gallons; and Claret per Hogshead of 57 or 58 Gallons; (all Increase and Decrease is adjusted.) All Kinds of Fish Oil is sold per Tun of 252 Gallons; Olive, Linseed, and Rape Oil, per Tun of 236 Gallons.

N. B The Duties which are paid by the Importers are included in the following Prices, and the Drawback, if Exported within three Years, is the Property of the Shipper.

	FROM £	s.	d.	TO £	s.	d.	Per
ALUM English	22	10	0	23	0	0	T.
——— Roach	1	18	0	0	0	0	C.
Almonds Barbary Bitter	4	15	0	0	0	0	—
——— Sweet	5	0	0	0	0	0	—
——— Jordan	12	0	0	12	0	0	—
——— Valentia	6	0	0	6	0	0	—
Annatto Flag	0	1	3	0	1	6	lb.
——— Spanish	0	4	9	0	5	0	—
Argol Bolu & Rhe. white	6	15	0	7	0	0	C.
——— Florence White	6	0	0	6	15	0	—
——— Red	6	10	0	6	10	0	—
——— Naples White	4	0	0	0	0	0	—
——— Red	3	10	0	0	0	0	—
Ashes Amer. Pearl,	3	10	0	0	0	0	—
——— Pot best	2	18	0	3	6	0	—
——— Barilla Tenerife	2	13	0	0	0	0	—
——— (Spanish	3	0	0	3	2	0	—
——— Sicily	2	12	6	0	0	0	—
——— Dantzic Pearl	uncertain			0	0	0	—
——— Russia Pot	3	0	0	0	0	0	—
BEERIES, Juniper, Ger.	2	0	0	2	6	0	—
——— Italian	2	18	0	3	0	0	—
——— Yellow Turkey	3	10	0	3	15	0	—
Brandy Best	1	6	0	1	8	0	G.
——— Inferior	1	5	0	1	6	0	—
Brimstone Foreign Ro	22	0	0	26	10	0	T.
Bristles Hog Russia und.	17	10	0	18	0	0	C.
——— Archangel do.	17	0	0	18	0	0	—
——— Koningsberg do.	18	0	0	18	10	0	—
CAPERS, French	7	0	0	13	0	0	—
——— Spanish	3	0	0	6	0	0	—
Cochineal Spa. Garbled	1	14	0	2	0	0	lb.
——— East India	0	5	10	0	7	6	—
Cocoa West India	3	18	0	4	10	0	C.
——Carracca for Export	5	16	0	6	6	0	—
Coffee W. I. very ord.	3	16	0	4	16	0	—
——— ord.	4	17	0	5	2	0	—
——— mid.	5	3	0	6	2	0	—
——— good	6	3	0	6	12	0	—
——— fine	6	14	0	7	3	0	—
——Mocha or East Ind	18	0	0	20	0	0	—
——— Java	5	0	0	6	0	0	—
Copper, unmanufac.	5	17	6	0	0	0	—
——— manufactured	0	0	0	0	0	0	—
——— Japan	0	0	0	0	0	0	—
Copperas, Green	0	6	3	0	0	0	—

		FROM £	s.	d.	TO £	s.	d.	Per lb.
Cotton Wool	Brazil Pernambuc	0	2	2	0	2	3	—
	Brazil Bahia	0	2	0	0	2	1	—
	Brazil Maranham	0	1	11	0	2	0	—
	Brazil Para	0	1	9	0	1	10	—
	Dutch Surinam	0	2	0	0	2	2	—
	Dutch Demerara	0	1	10	0	2	0	—
	Dutch Berbice	0	1	10	0	2	0	—
	No Tret allowed. West Indies Carriacou	0	2	0	0	2	1	—
	No Tret allowed. West Indies Grenada	0	1	9	0	1	10	—
	No Tret allowed. West Indies Barbadoes	0	1	9	0	1	10	—
	No Tret allowed. West Indies Domingo	0	1	6	0	1	8	—
	No Tret allowed. West Indies Martinico	0	1	6	0	1	8	—
	No Tret allowed. West Indies Jamaica	0	1	6	0	1	8	—
	No Tret allowed. West Indies Bahama	0	1	6	0	1	9	—
DYER'S Wood, Bar W.		23	0	0	25	0	0	T.
——— Brazil		90	0	0	0	0	0	—
——— Brazilet		14	0	0	16	0	0	—
——— Cam Wood		42	0	0	46	0	0	—
——— Fustic		26	0	0	28	0	0	—
——— Zant or young		20	0	0	0	0	0	—
——— Logwood Camp		40	0	0	42	0	0	—
——— Hond. chipt		28	0	0	0	0	0	—
——— Jamaica chipt		28	0	0	30	0	0	—
——— unchipt		0	0	0	0	0	0	—
——— Nicaragia, large		55	0	0	60	0	0	—
——— small		16	0	0	18	0	0	—
——— Sanders Red		40	0	0	45	0	0	—
DRUGS.								
ALOES, Barbadoes		28	0	0	30	0	0	C.
——— Succotorine		16	0	0	17	0	0	—
——— Hepatic or E. I.		10	0	0	0	0	0	—
Angelica Root		5	10	0	0	0	0	—
Antimony Crude		6	0	0	7	0	0	—
Arsenic Red		5	0	0	5	5	0	—
——— White		3	15	0	4	0	0	—
Balsam Capivi		0	3	9	0	0	0	lb.
——— Peru		0	2	6	0	10	0	—
——— Tolu		0	4	0	0	0	0	—
Bark, Jesuits,		0	4	0	0	4	6	—
——— Red		1	10	0	1	12	0	—
——— Yellow		0	4	9	0	6	0	—
Borax, refined E. I.		4	18	0	5	0	0	C.
——— English		0	2	4	0	0	0	lb.
——— unrefined or Tinc.		6	10	0	0	0	0	C.
Camphire Refined		0	8	0	0	9	0	lb.
——— Unrefined		27	0	0	0	0	0	C.

	FROM £	s.	d.	TO £	s.	d.	per
Cantharides	0	14	6	0	16	0	lb.
Cardemoms (best)	0	10	0	0	10	6	—
Cassia Buds	14	0	0	14	4	0	C.
——Fistula W. I.	3	15	0	5	0	0	—
——Lignea	6	0	0	18	0	0	—
Castor Oil p. bot. 1½lb.	0	5	6	0	0	0	bo
Cocculus Indicus	10	0	0	0	0	0	C.
Colocynth Turkey	0	3	0	0	3	6	lb.
Columbo Root	3	14	0	4	0	0	C.
Cream of Tartar	9	0	0	10	0	0	—
Essence of Bergamot	0	11	0	0	0	0	lb.
—— Lavender	0	7	6	0	8	0	lb.
—— Lemon	0	11	6	0	0	0	—
—— Origanum	0	7	6	0	8	0	—
—— Rosemary	0	4	6	0	5	0	—
Galangal, East India	2	15	0	3	0	0	C.
Gentian Root	4	12	0	0	0	0	C.
Ginseng	0	2	0	0	2	6	lb.
Gum Ammo. Drop	22	0	0	26	0	0	C.
—— Lump	8	0	0	12	0	0	—
Gum Arabic E. I.	2	10	0	4	10	0	C.
—— Turkey fine	9	0	0	11	11	0	—
—— Barbary	2	16	0	3	0	0	—
—— Assafœtida	5	0	0	12	0	0	—
—— Benjamin	16	0	0	22	0	0	—
—— Cambogium	20	0	0	26	0	0	—
—— Copal scraped	0	3	6	0	4	0	lb.
—— Galbanum	8	10	0	9	0	0	C.
—— Guaiacum	0	3	6	0	5	0	lb.
—— Mastic	0	6	2	0	6	6	—
—— Myrrh	25	0	0	28	0	0	C.
—— Olibanum	6	0	0	9	0	0	C.
—— Sandrac	6	10	0	0	0	0	—
—— Seneca, garbled	5	0	0	5	2	6	—
—— Tragacanth	10	0	0	21	0	0	—
Jalap	0	3	6	0	3	8	lb.
Ipecacuanha	0	16	0	0	18	0	—
Isinglass, Book	1	3	0	0	0	0	—
——— Leaf	1	5	0	0	0	0	—
——— Long Staple	1	9	0	0	0	0	—
Manna,	0	4	6	0	5	0	—
Musk, China	0	17	6	1	0	0	oz
Nox Vomica	2	0	0	2	10	0	C.
Oil of Vitriol	0	0	4	0	0	4½	lb.
Opium	1	4	0	0	0	0	—
Pink Root	0	1	0	0	1	4	—
Quicksilver	0	4	2	0	0	0	—
Rhubarb, East India	0	2	6	0	7	0	—
——— Russia	0	18	0	1	2	0	—
Saffron	1	16	0	2	4	0	C.
Sago	1	18	0	2	6	0	—
Sal Ammoniac	9	15	0	10	0	0	—
Salop	15	15	0	0	0	0	—
Sarsaparilla	0	1	10	0	3	3	lb.
Sassafras	3	0	0	0	0	0	C.
Scammony,	1	10	0	2	0	0	lb.
Senna	0	4	0	0	5	6	—
Seeds, Anni. Alicant	6	15	0	7	0	0	C.
—— Coriander, English	1	3	0	1	5	0	—
—— Cummin	3	8	0	4	0	0	—
—— Fenugreek	3	10	0	0	0	0	—

	FROM £	s.	d.	TO £	s.	d.	per
Shellack	4	0	0	8	0	0	C.
Sticklack	4	10	0	7	0	0	—
Snake Root	0	3	3	0	3	6	lb.
Soap, Castile or Spanish	8	0	0	8	10	0	C.
Soap, Yellow	4	14	0	0	0	0	—
—— Mottled	5	4	0	0	0	0	—
—— Curd	5	18	0	0	0	0	—
Spermaceti refined	0	2	4	0	0	0	lb.
Tamarinds West India	5	5	0	6	0	0	C.
Tapioca, Lisbon	0	0	6	0	1	0	lb.
Turmeric, Bengal	4	15	0	0	0	0	C.
——— China	5	5	0	5	15	0	—
——— West India	3	10	0	3	15	0	—
Verdigrise Wet	0	2	9	0	3	3	—
——— Dry	0	4	10	0	5	4	—
——— Crystallized	0	7	6	0	8	0	—
Vitriol, Roman	0	0	7	0	0	7½	lb.
EBONY, Black Rose	28	0	0	33	0	0	T.
——— Green	12	10	0	13	10	0	—
Elephᵗ. 70 to 90lb each	28	0	0	33	0	0	C.
———Scrivelloes	14	0	0	16	0	0	—
FEATHERS, Dantz.	0	3	0	0	3	6	lb.
——— Hambro'	0	2	2	0	3	0	—
——— Russia	0	1	10	0	3	0	—
——— Down	0	3	9	0	4	6	—
Flax, Riga	107	0	0	108	0	0	T.
---Petersburgh 12 head	92	0	0	0	0	0	—
GALLS, Aleppo blue	7	16	0	0	0	0	C.
——————mixt	5	15	0	5	17	6	—
Geneva Holland	1	2	6	1	3	0	—
Glue, For. dry thick lea.	2	12	0	0	0	0	C.
——————thin	2	10	0	0	0	0	—
HEMP, Riga Rhine H	74	0	0	0	0	0	T.
——————Out shot	72	0	0	0	0	0	—
——Codilia	72	0	0	0	0	0	—
——Petersburg Clean	76	0	0	0	0	0	—
Hides Raw West India	0	0	4	0	0	5	lb
——————Buenos Ayres	0	0	6	0	0	7	—
——————Brazil	0	0	4½	0	0	5	—
——————Horse, British	0	15	6	0	16	0	Hi
INDIGO.							
Spanish: Guatimala Flora	0	11	0	0	12	3	lb.
Spanish: ——————Sobres	0	8	9	0	10	9	—
Spanish: ——————Cortes	0	5	0	0	8	6	—
Spanish: Carracca Flora	0	10	0	0	11	9	—
Spanish: ——————Sobres	0	8	9	0	9	6	—
Spanish: ——————Cortes	0	5	9	0	8	6	—
Brazil	0	1	6	0	3	0	—
East Ind.: Blue	0	10	0	0	11	6	—
East Ind.: Purple	0	7	6	0	9	3	—
East Ind.: Copper and violet	0	7	6	0	9	6	—
East Ind.: Copper	0	5	9	0	7	3	—
IRON British in bars	18	0	0	0	0	0	T.
——————in pigs	9	10	0	0	0	0	—
——Old Sable	23	0	0	29	0	0	lb.
——New Sable	21	0	0	0	0	0	—
——Gurioffs	21	10	0	22	0	0	C.
——Archangel	0	0	0	0	0	0	—
——Swedish	20	0	0	0	0	0	—
LEMONS repa.	6	0	0	0	0	0	C.

	FROM £	s.	d.	TO £	s.	d.	
Licorice Italian	11	5	0	0	0	0	Cwt.
——— Spanish	10	10	0	0	0	0	—
Lead, Pigs	36	0	0	0	0	0	T.
——Mill'd or Sheet	39	0	0	0	0	0	T.
——Bars	38	0	0	0	0	0	—
——Shot No. 1 to 5	40	0	0	0	0	0	—
———— 6 to 12	40	10	0	0	0	0	—
——Litharge	40	0	0	0	0	0	—
——Red	35	0	0	0	0	0	—
——White	49	0	0	0	0	0	—
——Ore	27	0	0	0	0	0	—
MADDER, Dutch Cro.	5	15	0	6	15	0	C.
———Ombro	4	15	0	5	15	0	—
———Gainene	2	0	0	4	5	0	—
———Mulls	0	10	0	1	0	0	—
——— Roots	0	77	0	0	78	0	—
Mats, Archangel	7	10	0	0	0	0	M.
OIL Lucca or Sallad	30	0	0	35	0	0	Jar
——½ chest	4	4	0	4	10	0	—
——Olive Barbary	81	0	0	82	0	0	T.
——Gallipoli	75	0	0	0	0	0	—
——Palm	3	15	0	0	0	0	C
——Turpentine, Eng.	7	10	0	8	0	0	—
———Foreign	7	0	0	0	0	0	—
——Rape English	60	0	0	0	0	0	T.
———Refined	65	0	0	0	0	0	—
——Linseed, English	78	0	0	0	0	0	—
——Cod Newfound.	41	10	0	0	0	0	—
——Sperm.	110	0	0	0	0	0	—
———Head Matter	114	0	0	0	0	0	—
——Whale, Greenland	35	0	0	0	0	0	—
——Brazil or S. Fish	42	0	0	0	0	0	—
Oranges Lisb. repa. best	4	10	0	5	0	0	ch
———St. Michael's	2	5	0	0	0	0	bx
Orchil-Weed, Canary B.	none			0	0	0	T.
———Inferior	140	0	0	0	0	0	—
——Cape de Verd	90	0	0	0	0	0	—
PITCH American	1	3	0	0	0	0	C.
——Archangel	1	2	0	0	0	0	—
——Sweden	0	19	6	0	0	0	—
——British	1	1	0	0	0	0	—
PROVISIONS. Butter Carlow 1st	5	15	0	5	17	0	—
Butter Cork 1st	5	6	0	5	10	0	—
Butter Waterford 1st	5	2	0	5	10	0	—
Butter Holland	5	10	0	0	16	0	—
Butter Friesland	5	0	0	5	18	0	—
Butter York Best	3	4	0	3	6	0	Fi
Butter Cumberland	3	0	0	3	4	0	—
Irish Bacon new	3	5	0	3	14	0	C.
Irish Beef India	10	10	0	10	15	0	Ti
Irish Beef mess	7	7	0	7	16	0	—
Irish Pork India	9	12	6	9	17	6	Ti
Irish ——new mess	5	12	6	5	17	6	—
Hams, York	6	15	0	7	5	0	C
——Westphalia	4	10	0	5	5	0	—
Rags Hambro' SPF	3	7	0	3	8	0	C.
——————FF	2	14	0	2	17	0	—
——————FX	1	18	0	2	0	0	—
——Italian fine	3	12	0	0	0	0	—
——————Seconds	3	0	0	0	0	0	—
Rice,	1	10	0	0	0	0	—

		FROM £	s.	d.	TO £	s.	d.	
RAISINS, &c. Wholesale Dy Prices.	Currants	3	10	0	4	14	0	C.
	Figs Faro	2	6	0	0	0	0	—
	——Turkey	2	10	0	3	0	0	—
	Prunes new	3	16	0	4	4	0	—
	Muscatels	6	0	0	10	0	0	—
	Bloom or Jar	4	0	0	7	0	0	—
	Sun or Solis. new	3	0	0	4	0	0	—
	Denia or Malaga	2	6	0	2	12	0	—
	Sultana	4	10	0	4	16	0	—
	——Smyrna new	3	8	0	4	0	0	—
Rosin		0	17	0	0	18	0	—
Rum Jamaica		0	4	10	0	6	6	G.
——Leeward Island		0	4	0	0	4	4	lb.
SACCARUM Saturni		0	1	3	0	0	0	C.
Safflower		4	10	0	6	10	0	—
Saltpetre, Eng. [n. Rough		4	1	0	4	2	6	—
——— British, Refined		4	8	0	4	10	0	—
Smalts		0	1	9	0	2	9	lb.
Shumack		1	6	0	1	10	0	C.
Skins undressed	Goat Turkey	1	5	0	2	15	0	D.
	—Mogadore	1	15	0	2	10	0	—
	Lamb Italian	12	12	0	0	0	0	—
	—— Spanish	6	0	0	6	10	0	—
	Kid Italian	17	0	0	0	0	0	—
	—— Spanish	6	0	0	9	0	0	—
	Seal Greenl.	0	2	11	0	0	0	sk.
	—So. Fishery	0	6	0	0	10	0	—
	Calf British	0	10	0	0	12	6	—
	—For. salted	0	0	6	0	0	11½	lb.
Silk Thrown 16 oz. to a lb. Raw 16oz. to a lb.	Bengal Skein	0	19	0	0	30	0	—
	—— Novi	0	23	0	0	44	0	—
	China 3 moss	none			0	0	0	—
	—— 6 moss	0	32	6	0	38	0	—
	Milan	39	0	0	42	0	0	—
	Reggio	0	31	0	0	32	6	—
	Brutia	0	32	0	0	35	0	—
	Bergam	0	53	0	0	56	0	—
	Brescia	none			0	0	0	—
	Modena	none			0	0	0	—
	Piedm	0	59	0	0	65	0	—
	Milan	0	53	0	0	55	0	—
Spices, Cinnamon		0	10	0	0	11	0	—
——Cloves		0	10	6	0	11	6	—
——Mace Long		2	6	0	2	7	0	—
——Nutmegs		1	0	0	1	4	0	—
—Ginger, Barbadoes W.		4	10	0	4	15	0	C.
——Jamaica Black		4	10	0	4	15	0	—
——————White		3	10	0	7	0	0	—
——————East India		3	10	0	4	0	0	—
——Pepper		0	2	6½	0	2	7	lb.
——————White		0	4	3	0	4	4	—
——————Dust		0	6	0	0	7	0	—
——————Long		7	10	0	8	0	0	C.
—Pimento or Jam. Pep.		0	1	11	0	1	11½	lb.
Spirits Malt		0	15	3	0	0	0	G.
* SUGAR. Waterside P.	Antigua	0	79	0	0	81	0	C.
	Barba. Clayed 1s	0	90	0	0	93	0	—
	——————2d	0	84	0	0	86	0	—
	——————3d.	0	80	0	0	82	0	—
	Musco. or brown.	0	76	0	0	80	0	—
	Dom. Nev. & Tor.	0	77	0	0	80	0	—

* Sugars imported into Great Britain from the East Indies by the East India Company, are bonded, and on being cleared out of the East India Company's warehouses, for home consumption, the purchasers are to pay the custom duty of 11. 0s. per cwt. Additional duty on all sugars 20 per cent. All white or clayed sugar of the British plantation imported since the 24th of June, 1780, pays a seventh duty or 11. 3s. 4d. per cwt. All British plantation raw sugar on being exported to Ireland or elsewhere, draw back 27s. per cwt. Havannah sugar, if warehoused, pays a duty of 1s. 10½ per cwt. on being exported. Refined sugar, called bastard pound sugar, 9s. 6d.; and on bastard broken in pieces, 13s. 1d. All refined sugar, 53s. except double loaves, which at 50s. Refined sugar broken in pieces, is allowed a bounty of 53s. per cwt. on exportation. If exported in a foreign ship, 1l. 6d. less.

		TO £	TO s.	TO d.	FROM £	FROM s.	FROM d.	C.
SUGAR. Waterside Prices.	Grenada Muscov.	0	76	0	0	78	0	
	Jamaica brown	0	76	0	0	78	0	
	——— middling	0	79	0	0	81	0	
	——— good	0	81	0	0	82	0	
	——— fine	0	83	0	0	85	0	
	St Kitts & Monts.	0	78	0	0	82	0	
	Tobago & St Vin.	0	77	0	0	80	0	
	Surinam & Dem.	0	75	0	0	77	0	
	Trinidad	0	75	0	0	77	0	
	East India	0	74	0	0	81	0	
Sugar Brokers Prices	Ground tips	0	75	0	0	78	0	
	——— middles	0	80	0	0	86	0	
	——— Faces	0	84	0	0	90	0	
	Lumps, Brown	0	108	0	0	110	0	
	——— Middling	0	112	0	0	114	0	
	——— Best	0	116	0	0	118	0	
	Sing. Loa. Brown	0	108	0	0	112	0	
	——— Middling.	0	120	0	0	0	0	
	——— Best	0	121	0	0	125	0	
	Powder Loaves	0	125	0	0	130	0	
	Molasses	0	39	0	0	0	0	
TALLOW Town		4	18	6	0	0	0	
——— Russian Yellow		3	15	0	0	0	0	
——— White		3	12	0	0	0	0	
——— Soap		3	11	0	0	0	0	
Rough Fat		0	5	1	0	0	0	st.
TAR Carolina		uncert.			0	0	0	C.
——Virginia					0	0	0	
——Archangel		2	10	0	0	0	0	
——Stockholm		2	12	0	0	0	0	
TEA without Duty or Excise.								
——Bohea		0	1	4	0	2	0	lb.
——Congou		0	3	2	0	3	10	
——Campoi		0	3	6	0	3	9	
——Pekoe		0	4	0	0	4	7	
——Twankay		0	3	5	0	3	9	
——Hyson Skin		0	3	6	0	4	0	
——Hyson		0	4	10	0	5	10	
——Gunpowder		0	5	8	0	7	1	C.
TIN in bars on board		6	2	0	0	0	0	
——In Blocks do.		6	3	0	0	0	0	
——Grain in blocks		8	0	0	8	8	0	
TIMBER. Deals	Dantz 3in by 10 ft	3	10	0				each per C. Ld.
	——2¼——36	0	0	0	0	0	0	
	——2 ——30	0	0	0	0	0	0	
	Archangel	0	0	0	0	0	0	
	Petersburgh	0	0	0	0	0	0	
	Narva Yellow	0	0	0	0	0	0	
	——White	0	0	0	0	0	0	
Dantzick Fir		13	0	0	0	0	0	

		FROM £	FROM s.	FROM d.	TO £	TO s.	TO d.	Per L.
TIMBER. American	Memel Fir	12	10	0	0	0	0	
	Riga Fir	0	0	0	0	0	0	
	Oak Board	12	10	0	0	0	0	
	Pine Boards	8	5	0	0	0	0	
	Timber	0	0	0	0	0	0	
Tobacco bonded	Maryland fi	0	1	1	0	1	4	
	Good Colour	0	0	10	0	1	0	lb.
	Middling do.	0	0	9	0	0	10	
	Virginia fine	0	1	1	0	1	4	lb.
	Ordinary	0	0	9	0	0	11	
	Carolina	0	0	7½	0	1	1	
	Georgia	0	0	10	0	1	1	
	Strip leaf	0	1	2	0	1	4	
	Turkey	0	1	4	0	1	8	
Tortoise-shell		0	18	0	1	3	0	
Turpentine, American		2	4	0	0	0	0	C.
Valonia		21	0	0	22	0	0	T.
Vermilion, Dutch		0	4	10	0	0	0	lb.
——China		0	5	0	0	7	6	
WAX, Bees, English		16	0	0	0	0	0	C.
——American		15	0	0	15	10	0	
——African		11	0	0	11	11	0	
——Dantzic & Ham.		16	0	0	16	10	0	
——Hambro' white.		0	3	8	0	0	0	lb.
WINE Dealers Prices of	Red Port	94	0	0	98	0	0	P.
	——Old	100	0	0	0	0	0	
	Sherry	92	0	0	100	0	0	Bt.
	Lisbon	87	0	0	90	0	0	P.
	Vidonia	75	0	0	78	0	0	
	Bucellas	95	0	0	100	0	0	
	Mount. Old	65	0	0	70	0	0	Bt
	Madeira Old	80	0	0	190	0	0	P.
	Claret	70	0	0	90	0	0	H.
	Rhenish	0	0	0	0	0	0	A.
Wood, Box American		0	0	0	0	0	0	T.
——Turkey		16	0	0	23	0	0	
——Cedar, Carolina		0	0	6½	0	0	11	Ft
——Jamaica		0	1	0	0	0	0	
Lignum Vitæ Jamaica		14	0	0	32	0	0	T.
——Providence		0	0	0	0	0	0	
——Mahogany Hispa.		0	2	3	0	2	9	Ft
——Honduras		0	1	5	0	1	7	
Wool Beav. Ruffing Best		0	82	0	0	0	0	
——Wooms Brown		0	80	0	0	0	0	lb.
——Best White		0	74	0	0	0	0	
——White Stage		0	46	0	0	0	0	
——Coat Seasoned		0	40	0	0	0	0	
——Coney English		0	17	6	0	10	0	
——Goats Smyrna		0	4	6	0	5	9	
——Vigonia Red		0	11	0	0	14	0	
——Pale		0	4	6	0	5	0	
Yarn Mohair Smyrna		0	4	6	0	9	0	

PREMIUMS OF INSURANCE FROM LONDON.

At 1½gs. To Yarmouth, Hull, Newcastle, Liverpool, Chester, &c.—At 2 gs. Ports of Scotland, Weymouth, Dartmouth, Plymouth, Jersey, Guernsey.—At 3 gs. Dublin, Cork, Derry, Limerick, Bristol, Chester, &c. From Liverpool, Bristol, &c. to Dublin, Cork, or Waterford.—Bengal, Madras, China.—At 4 gs. St. Helena, or Cape of Good Hope, Dublin, Cork, &c. to London, (Comp. ships) return 2l. From Poole, &c. to Newfoundland, to U. S. of America, American ships.—At 5 gs. To Madeira to U. S of America.—At 6 gs. Gibraltar, Madeira, return 3l.—At 8gs. Newfoundland, Labradore, &c. Jamaica, or Leeward Islands.—Brazil, South America, return 4l.—At 10 gs. Senegambia; U. S. of America (Brit. Ships) return 5l. Jamaica, South America.—At 14 gs. To Musquito shore, Honduras, &c. return 6l.—To East Indies, or home.—East Indies to London.—Westward and Leeward Islands to U. S. of America, Quebec, Montreal, &c.—At 20 gs. Southern Whale-fishery.—At 25 gs. Newfoundland, Jamaica, and Westward Islands.—To Gottenburgh and back 20 gs. return 4 with convoy.—Stockholm and places adjacent, 16gs. return 4.—Lisbon and Rio de Janeiro, 8 gs. return 4.—Oporto, 10 gs. return 4.—Mediterranean 8 gs. return 4l.—From Liverpool to America, 5 gs.—To Amsterdam and Rotterdam, 6 gs.

Daily Prices of STOCKS, from 20th of JANUARY to 20th of FEBRUARY, 1810.

	Bank Stock.	3 per Cent. Reduced.	3 per Cent. Consols.	4 per Cent. Cons. 1780.	3 per Cent. Def.	Navy 5 per Cent.	Long Annuities.	Consol Short An.	5 per Cent. 1797.	Omnium.	Imperial 3 per Cent.	Ditto Annuities.	India Stock.	India Bonds.	Old Annuities.	New Ditto.	Vict. Bills.	3½ d. Exchequer Bills.	Lottery Tickets.	Consols for Acct.	Irish Omnium.	Irish 5 per Cent.
																			£ s. d.			
1810.																						
Jan. 19	277	69¼	68⅛	84⅞	—	99½	18½	—	—	—	—	—	—	4 8p	—	—	—	8 11p	—	69⅛	—	—
20	277	69¼	68⅛	85	—	99	18⅛	—	—	—	—	—	186	6 7p	—	—	—	8 11p	—	69⅛	—	—
22	—	69⅛	68⅛	84⅞	—	99½	18⅛	—	—	—	—	—	187	5 7p	—	—	—	11 7p	—	69	—	—
23	—	69¼	68½	84¾	—	100	18⅛	—	—	—	—	7	188	5 7p	—	—	—	10 4p	—	69	—	—
24	—	68¾	68⅜	84⅜	—	99⅛	18⅛	—	—	2 1½p	7¼	—	187	6 7p	—	—	—	5 10p	—	68¾	—	—
26	276	68½	68	84	—	99½	18⅛	—	—	2 p	67⅝	7¼	188½	12 15p	—	—	—	6 10p	—	68½	—	—
27	276	68½	68¼	84½	—	99⅝	18½	—	—	—	—	—	—	15 18p	—	—	—	7 11p	—	68⅝	—	—
29	—	68½	68⅜	84½	—	99½	18⅝	—	—	—	67½	—	—	17 18p	—	—	—	6 11p	—	68⅝	—	—
31	276½	68½	68¼	84	—	99⅜	18½	—	—	—	67⅞	7¼	—	17 15p	—	—	—	10 7p	—	68¾	—	—
1810.																						
Feb. 1	276	68⅛	67⅛	84⅞	—	99⅜	18⅛	—	—	—	—	7¼	187½	—	—	—	—	7 4p	—	68⅛	—	—
3	—	68¼	68¼	84	—	99⅜	18½	—	—	—	—	7½	187	14 13p	—	—	—	9 5p	—	68¼	—	—
5	—	68⅛	68	84	—	99⅛	18½	—	—	—	—	—	—	—	—	—	—	8 3p	—	68⅛	—	—
6	276	68¼	68	84	—	99⅜	18½	—	—	—	—	7½	186½	11 12p	—	—	—	9 8p	—	68½	—	—
7	—	68⅛	68¼	84	—	99⅜	18⅝	—	—	—	67⅞	—	185½	11 12p	—	—	—	5 10p	—	68½	—	—
8	275	68½	68	84½	—	99	18⅝	—	—	—	—	—	186	11 9p	—	—	—	5 9p	—	68¼	—	—
9	275	68¼	68¼	84⅜	—	99⅛	18⅝	—	—	—	—	—	187	9 11p	—	—	—	5 10p	—	68¼	—	—
10	—	68⅛	68¼	84	—	99⅛	18⅝	—	—	—	—	—	—	12p	—	—	—	6 10p	—	68⅜	—	—
12	276½	68½	68	84⅛	—	99⅜	18⅝	—	—	—	—	—	186½	—	—	—	—	5 10p	—	68⅛	—	—
13	276½	68½	68	84⅛	—	99	18⅝	—	—	—	—	—	185½	10 11p	—	—	—	3 9p	—	68¼	—	—
14	—	68	67⅝	83¾	—	99¼	18½	—	—	—	66½	7½	185½	10 6p	—	—	—	8 1p	—	67	—	—
15	—	67¾	67½	83½	—	99	18⅝	—	—	—	—	—	185½	5p	—	—	—	2 5p	—	67⅛	—	—
16	276½	68	67⅝	83¾	—	99⅛	18⅝	—	—	—	—	—	—	7 11p	—	—	—	— 8p	—	67	—	—
17	276	68½	68	84	—	99⅛	18⅛	—	—	—	—	—	—	12 13p	—	—	—	4 9p	—	68¼	—	—
19	—	68¼	67⅝	83¾	—	99⅛	18⅛	—	—	—	—	—	—	11 p	—	—	—	3 9p	—	68	—	—
20	276	67½	68⅜	83⅝	—	99⅛	17⅞	—	—	—	—	—	—	9 11p	—	—	—	3 8p	—	67¾	—	—

The above are taken at the highest prices of the day.

ISAAC VALE, Stock-Broker, 74, Bishopsgate Without.